



COMMONWEALTH OF AUSTRALIA

SENATE

**RURAL AND REGIONAL AFFAIRS AND TRANSPORT REFERENCES
COMMITTEE**

Reference: Commercial utilisation of native wildlife

CAIRNS

Wednesday, 2 July 1997

OFFICIAL HANSARD REPORT

CANBERRA

SENATE
RURAL AND REGIONAL AFFAIRS AND TRANSPORT REFERENCES COMMITTEE

Members:

Senator Woodley (Chair)

Senator Calvert	Senator Crane
Senator Bob Collins	Senator Foreman
Senator Conroy	Senator Heffernan

Participating members

Senator Abetz	Senator Gibbs
Senator Bob Brown	Senator Lundy
Senator Brownhill	Senator Margetts
Senator Chapman	Senator Murphy
Senator Colston	Senator Murray
Senator Cook	Senator O'Brien
Senator Eggleston	Senator Tambling
Senator Ferris	Senator West

Matters referred for inquiry into and report on:

- (a) the potential impact which commercial utilisation of native wildlife might have on the Australian environment;
- (b) the current and future economic viability of these commercial activities; and
- (c) the adequacy of existing Federal Government regulations and controls to ensure biodiversity of any native species commercially utilised.

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SENATE
RURAL AND REGIONAL AFFAIRS AND TRANSPORT REFERENCES COMMITTEE

Commercial utilisation of native wildlife

CAIRNS

Wednesday, 2 July 1997

Present

Senator Woodley (Chair)

Senator Colston

Senator O'Brien

Senator Heffernan

The committee met at 9.00 a.m.

Senator Woodley took the chair.

CHAIR—Today the committee holds its third public hearing on the commercial utilisation of Australian native wildlife. The first hearing was held in Canberra on 2 December 1996 and the second in Brisbane on Monday 20 June 1997. The committee held its first inspection yesterday. In the morning, members visited several bird aviaries in the Brisbane region. In the afternoon, the committee travelled to Cherbourg Aboriginal community where it visited an emu farm and processing facility. Tomorrow inspections will be carried out in the Cairns region. For the record, this is a public hearing and as such members of the public are welcome to attend.

This matter was referred to the committee by the Senate on 30 October 1996. On 27 May 1997, the committee tabled an interim report which noted that, because the subject was a complex one and some aspects of it were of considerable concern to many people, it had decided to conduct an extensive program of public hearings and inspections throughout Australia. This set of hearings is the first part of that program. The reporting date for the inquiry is now the last sitting day in February 1998. To date, the committee has received over 320 submission, many of which have contained lengthy and comprehensive attachments.

The committee's terms of reference are broad ranging and require the committee to look at all aspects of the commercialisation of Australian native wildlife. However, while the committee has decided that this inquiry may include all land based plants and animals and some marine life, such as molluscs and corals, it has decided to exclude commercial fisheries from the inquiry because the area is very large in itself and has been the subject of a number of other separate inquiries. In addition, although feral animals do not strictly fall within the committee's terms of reference, their consideration will not be totally excluded but will be touched on where relevant to biodiversity and habitat conservation.

Before we commence taking evidence, let me place on record that all witnesses are protected by parliamentary privilege with respect to submissions made to the committee and evidence given before it. Parliamentary privilege means special rights and immunities attach to the parliament, or its members and others, that are necessary for the discharge of the functions of the parliament without obstruction and without fear of prosecution. Any act by any person which operates to the disadvantage of a witness, on account of evidence given by him or her before the Senate or any committee of the Senate, is treated as a breach of privilege.

[9.03 a.m.]

FREEMAN, Mr Peter John, Managing Director, Hartley's Creek Crocodile Farming Company Pty Ltd, PO Box 171, Palm Cove, Queensland 4879

CHAIR—Welcome. We are happy if you want to make an opening statement and we will then proceed to questions.

Mr Freeman—Thank you for inviting me here today to present my views to this Senate inquiry. I want firstly to point out that, when looking at the terms of reference, I had a little trouble working out what the purpose of the whole inquiry was.

Where you say 'commercial utilisation', I was trying to work out whether the intention of the committee was to decide whether we should utilise our native wildlife or, if the committee accepts that we should utilise our native wildlife, will it be trying to promote that utilisation of wildlife? In preparing my submission, I was trying to not only defend commercial utilisation but also promote the message that the Senate inquiry should take back to parliament: that Australia should be trying to support the principles of economically sustainable development and promote utilisation of our native wildlife.

I will give you a little background about my history. I have been involved in crocodile farming for over 10 years. Hartley's Creek is a tourist attraction and crocodile farm north of Cairns. With our parent company, Austpan Pacific, we were the first company in Australia to vertically integrate the whole crocodile industry. Between Hartley's Creek and our parent company, we breed crocodiles, collect eggs, incubate eggs, raise hatchlings, process the animals for skin and meat, contract tan the skins, sell the meat on the domestic and international markets and manufacture the finished leathers into handbags and other leather goods.

On the conservation side, the crocodile industry in Australia is controlled by three levels of government. You have the state government and the federal government through Environment Australia. We are also controlled internationally through CITES. The conservation policies in place in Australia have to be internationally approved because Australia is a signatory to CITES. In Australia, we operate under two systems: you can ranch the crocodiles—by collecting eggs and hatchlings from the wild—and captive breed the animals, as we do in Queensland.

Worldwide conservation of crocodiles is being held out by the global conservation groups as a true success story. Twenty years ago, half the crocodylian species were threatened by extinction. Now it has got to the point that crocodile species should never become extinct. One of the reasons for this is the demand by people for their goods and the interest to farm the products throughout the world. People have always been wanting crocodile leather, and people have always said, 'Okay, if there is a need there we can farm it.' From that farming has come research into the biology of the crocodiles that has helped

a much greater understanding of crocodiles.

With crocodile conservation, the Northern Territory operates under a system of sustainable utilisation. The Northern Territory farmers can go out and collect eggs from the wild, which is different to what we do in Queensland. In Queensland, we are trying to lobby the government to change their policy to open Queensland up to ranching. In the Northern Territory, they operate under a different system entirely controlled under a management plan. Farmers go out, collect the eggs, bring them back, incubate the eggs, raise the hatchlings and sell the product.

That system has a lot of advantages not only for the farmer but also for the crocodile and its environment. By putting a value on the animal and on the environment, it encourages people to protect the animal and the environment. At the moment in the Northern Territory, they are instigating a program where farmers can negotiate directly with the landowners to buy eggs from their farms. That means that crocodile farmers can go and pay for a nest from a farmer. From the farmer's point of view, that nest becomes a valuable resource. Instead of having crocodiles on his property which he sees could be a pest and may take some cattle, he has crocodile nests which become a source of income. One nest can earn a farmer between \$450 to \$500 just for protecting the environment.

That system has also worked very well in Louisiana and Florida where they have very little area in refuges or in national parks. Most of the marshlands or everglades in Louisiana and Florida are privately owned. They have had a system of ranching there for a number of years. It has worked very well because people can pay, or negotiate, to go on to the property and collect eggs—a quota is controlled by the government—and they pay the landowner. This has encouraged people not to drain the marshlands. The alligator populations in Louisiana and Florida are over 300,000 animals. There are about 270,000 animals in Louisiana alone and, 20 years ago, alligators were considered endangered in America.

CHAIR—I will ask the other senators to lead off with questions. The committee has no starting points in terms of what the report might show. What we are responding to are concerns from a whole lot of different and sometimes contradictory groups around the country and the fact that, with a growing industry, it is important for the national parliament to have the base data. That is the impetus behind the committee. We have not got any starting points in terms of what we think the report might say. It is simply wanting to respond to all the evidence we get.

Senator O'BRIEN—Your comments in relation to wildlife parks and the terms of reference for this inquiry raise an interesting point. You are saying that, because these animals exist in wildlife parks, they are no longer wild and therefore outside the terms of reference of the inquiry. Do I understand you to be saying that?

Mr Freeman—No. My interpretation of the terms of reference and the handouts is

that they do include animals in wildlife parks. I believe the Queensland Wildlife Parks Association contacted the committee and clarified a few issues. The feedback I got from them was that the committee was not really looking at wildlife parks. Whether that is correct or not, I do not know. At that time, I had already put in that section concerning wildlife parks because it is my interpretation that the terms of reference did pick it up. For our particular operation, we are a wildlife park and a crocodile farm.

Senator O'BRIEN—Going to the scope of operations of Austpan Pacific, you talk about the wildlife park, the crocodile farm, export registered crocodile meat processing plant and a tannery. Firstly, is the meat processing plant operating now?

Mr Freeman—Yes.

Senator O'BRIEN—How many people does that employ?

Mr Freeman—We operate on a casual basis but, during operation, about nine people.

Senator O'BRIEN—And how frequently does that operate?

Mr Freeman—It only operates, at this stage, a couple of months of the year.

CHAIR—Is that related to the need to cull the numbers?

Mr Freeman—When we built the factory, it turned out that we got a good deal to build the processing plant at that particular time. In the bigger picture, you could probably say that the processing plant was built a bit too early because we are yet to establish larger skin production numbers. In Queensland, you cannot take eggs or hatchings from the wild. You have to breed your own breeders and that is a very long-term project. It can take 10 years to take a hatchling up to a potential breeder. So we have been doing that over the last couple of years and we have got over 200 future breeders coming on-line in the next couple of years. So the processing plant will be better utilised in the future.

Senator O'BRIEN—Do you only process crocodiles from your own farm at this stage in that plant?

Mr Freeman—We have had other farms process there and we do rent out the facilities. We even had inquiries from ostrich farmers to rent out the facility.

Senator O'BRIEN—And is it accredited for export to all countries?

Mr Freeman—Yes. We are operating on an AQIS FPA system. Certain countries do require additional certification, such as Hong Kong. It just means that, if we have to export to some countries that require additional things, we contact AQIS first and they

come down and do an inspection and arrange the necessary documents.

Senator O'BRIEN—And roughly how many crocodiles per year would be processed there?

Mr Freeman—We process probably about 600 crocodiles a year at this stage, but we expect production to be up to around 2,000 to 3,000 early next century.

Senator O'BRIEN—That is out of your 200 breeders?

Mr Freeman—Yes.

Senator O'BRIEN—I suppose it is a natural extrapolation if you can get into ranching that you would expect that to grow exponentially?

Mr Freeman—Yes. The Queensland croc farmers have been pushing ranching with the state government for over 10 years. For political and other reasons, ranching in Queensland has only come back onto the table in the last two years. So we are trying to push that. Though Queensland does not have a very large population of crocodiles out in the wild, there is potential to ranch that population. The Queensland government is currently conducting a survey to actually determine how many crocodiles are out there in the wild. There are estimates of about 30,000 to 50,000 animals in Queensland.

For the farmers, if we can get access to a ranching program, we see it as a great shot in the arm for the industry because we will encourage more people to get into the industry. Our biggest problem in Queensland is that we are only a very small industry. We do not have enough clout in export dollars to secure funding for research, and also to get a preferential hearing from government. The demand is out there. That is one great advantage with crocodile farming; there is a big demand for skins and an unbelievable demand for meat and also by-products. So we are very lucky in one stage.

Marketing is not a problem for us; it is getting the animals up to size. We see the ranching as giving a big advantage, not only for existing farmers, because we will get access to more stock, but it will encourage more people to come into crocodile farming. Also, a ranching-style farm is a lot cheaper in capital expenditure to get up and going because you only need to build an incubator hatchery and grow-out pen. You do not have to worry about housing breeders, which can be quite expensive.

Senator O'BRIEN—The tannery that you say in your submission is approved but yet to be constructed, are there any ongoing plans about that, or is that just on the back-burner until things get better?

Mr Freeman—We have got all the approvals. We have got the waste water treatment plant designed and approved by the Department of Environment. We have been

busy just trying to get the farm relocated and the leathersgood manufacturing factory established. That is the next project to get going. With tanning, it is basically a service. It is only just a cog in the wheel to us because tanneries traditionally do not make a lot of money, but the advantage for us to run our own tannery is that we can control exactly the quality and the finish of the skins. When you are buying from a tannery you have very little control over the finish and the colour of the skins that you wish to have. If you can control a tannery, you can say, 'Right; I want 50 black, tan, red, and three green', and you will get those skins, whereas in a tannery situation you just basically have to wait and take only what is available.

Senator O'BRIEN—Where is your product tanned now?

Mr Freeman—We get it contract tanned in Japan and then import it back, then manufacture it, then export the majority back to Japan.

Senator O'BRIEN—How many people are employed in the leathersgood factory?

Mr Freeman—Currently, we have about 26.

Senator O'BRIEN—Is that a full-time operation?

Mr Freeman—Yes.

Senator O'BRIEN—Where did you get the expertise to run the leathersgood factory?

Mr Freeman—That expertise has come through a joint venture. Austpan Pacific is the joint venture company. That expertise has come from Japanese partners that have been manufacturing leathersgoods in Japan for about 110 years. They have brought down the expertise and they have trained Australian staff in the manufacture of the leathersgoods. Initially, for the first year or two, we had a lot of Japanese staff down here just training our staff here. Now we have only one Japanese technician. Basically the whole factory is Australian-run.

Senator HEFFERNAN—If it is a joint venture, what is the incentive to send the skins back to you to process them further? Why would they not do it over there? You get the skins tanned in Japan and it is a joint venture with the Japanese. How did you manage to put enough incentive into the system to have the skins come back here for further processing and manufacturing into whatever?

Mr Freeman—Though the exchange rate has been fluctuating, the cost of manufacturing is cheaper in Australia than it is in Japan. Even though we have to export the skins to Japan to get them contract tanned and back, we can still get the products back to Japan cheaper than they can manufacture them in Japan at this moment.

Although initially we have been exporting the majority of the product back to Japan, now we are starting to get a break into other markets like New Zealand, Malaysia and other south-east Asian countries. We have even had some inquiries from the United States.

Senator HEFFERNAN—Are there any tariffs on the way in?

Mr Freeman—Not on the way in, because we are re-importing it, so we can claim back. We are not paying duty.

Senator HEFFERNAN—And there is no tariff into Japan?

Mr Freeman—Yes, there is a tariff into Japan. They have actually raised the tariff, so that has been a slight problem. The tariff is now 20 per cent. It was three per cent.

Senator HEFFERNAN—So you will be a fair bit better off when you do your own here?

Mr Freeman—Yes. Initially to get the whole thing up and going, it was far easier just to export it all to Japan and get the whole thing settled and established. We are aggressively marketing to Australia and other markets now and we will just drop back on exporting to Japan.

Senator COLSTON—I just have one question along the same lines. I am sorry I missed the first part of your presentation because you may have covered this already. Did you try to have some tanned in Australia in the first place?

Mr Freeman—We are getting some skins tanned down in Sydney at the moment. We are trying a new tannery down there. I think we are waiting for those skins to come back. Preferably, if we can get them tanned in Australia, that is great, but it is the quality of the tanning. With crocodile skin, you have two finishes. You have an oil or a matt finish and the glaze finish. The glaze finish is a very specialised finish and only a few tanneries can actually do it.

So we are trying this bloke down in Sydney and we should get the skins back pretty soon. If they look good, we will definitely be sending more skins down to him to get tanned in Australia. With the crocodile skin tanning, there are only about three countries that do it well. There is only France, Japan and Singapore. They closely guard the secret of that final finish or glaze on it. It took us a lot of time, money and contacts to actually develop our own formulas.

CHAIR—In terms of your submission, you said that you think the industry is over-regulated and there is a lack of coordination between state and federal authorities. I notice in your evidence you said that there is this whole difference between the Northern

Territory where they have ranching and Queensland where you are only allowed to have captive breeding. Do you think if there were some uniform national standards that would be help or a hindrance?

Mr Freeman—I think it would be a help, because in our daily operations we have to deal not only with the state department of the environment, but also Environment Australia, because Environment Australia controls export. Just from day to day dealings, there is not much communication between the two departments. There never has been. Traditionally, since the great kangaroo debate, there has always been a lack of communication. They have different ideas, different policies and a lot of the time farmers just feel like they are the meat in the sandwich.

Rules do change. The Northern Territory operates under a different system. I feel that if we had a wish it would be that uniform rules would be a definite benefit. Then all of the farmers can play on an even playing field across the country or the three states that do farm crocodiles. Our biggest problem in Queensland at the moment is to try to get a ranching program established so we can get access to the stock that is out there to help boost our industry.

CHAIR—We will be having hearings in every state so it is useful to get that comment. Obviously, we will ask the other states as well. In your submission you say that there is not sufficient emphasis on conservation of the environment. Have you got any suggestions about other measures?

Mr Freeman—Going from my personal dealings with the departments and working with the legislation, when you get down to the legislation it is just a document on empowering their officers and how they administer themselves. There seems to be little in the legislation and little in the policies about going out and protecting the environment. With a ranching program it is absolutely critical that the environment be protected. If there is no facility to protect the environment, the ranching program will basically fail because you need crocodiles out in the wild, breeding successfully, to sustain a ranching program. If you get habitat loss or habitat destruction, a ranching program will not work.

That is why the Northern Territory program has been such a success. They have tied in not only conservation of the crocodiles but also conservation of the environment. Farmers are getting access to stock and they are paying for it. They are part funding the protection of that environment. People are starting to see crocodiles as something of value and it encourages them to help protect those crocodiles.

Also, by having a legitimate crocodile farming operation, you satisfy the demand of people for crocodiles products. You are not encouraging people to go out in the wild and kill crocodiles or poach them because the product is there and it is far cheaper than what they could ever do.

CHAIR—And a bit safer.

Mr Freeman—Yes, a lot safer too.

CHAIR—In terms of ranching, they take the eggs, I presume. At the crocodile farm at Rockhampton, they were telling us that they occasionally collect rogue crocodiles too as a kind of public service. Do you do anything like that?

Mr Freeman—The problem crocodile plan is up for review at the moment. The next meeting is in August and they are trying to review the whole plan. We have not participated in the problem crocodile plan for about seven years now. We got out of it. It was getting too hard bureaucratically to deal with it. It was an example of a lack of communication between the state environment department and Environment Australia. The state government was issuing licences for farmers to collect problem crocodiles while Environment Australia was saying, 'By our definition, you are ranching animals and Queensland does not have an approved ranching program. You can go ahead and collect those crocodiles but they can never be used for breeding. You must hold them separately and have them identified forever so that their progeny can never be used for skins or meat.' It was just too hard.

CHAIR—It sounds like it. In the 1970s there was some fear that crocodiles were becoming quite endangered. Have numbers increased significantly since then?

Mr Freeman—Yes. Crocodiles became protected in 1974 in Queensland and 1972 in the other states and since then the numbers have come back. The estimate in the Northern Territory, excluding populated areas, is that the populations are almost up to the same level as before white settlement. They have made a remarkable comeback. Crocodiles are survivors, they have been around for millions of years, but the critical thing for crocodiles is that to be able to survive they must have habitat. Habitat protection is the key.

CHAIR—Are there any issues that we should be aware of that are problems for you in terms of conservation requirements, such as effluent?

Mr Freeman—Not really. When you come out and see the farm tomorrow, you will see that those problems can be dealt with. We have got our own waste water treatment plant on site. It is just a natural lagoon situation. Because of the conditions we have imposed on us, we cannot discharge any water from our property except during the wet season. The water we discharge has to be an equal or lower level in nitrogen, phosphorus and BOD to the background levels.

CHAIR—I see that you were a little sceptical about this committee's deliberations. You are worried that, quoting from you, 'Australia is standing idle waiting for the protracted outcome of committee deliberations.' I was wondering if there are any specific

ones that you want us to deal with?

Mr Freeman—I think that comment mainly came about from the fact that I did not know what the driving force of the committee was. But, as you explained it, it is basically open. My original thoughts or fears were whether this committee was looking at whether we should have commercial utilisation or not or, having accepted commercial utilisation, how we go about legitimising it, controlling it and improving it. That was the main basis of our concern.

The South-East Asian countries like Indonesia are starting to farm saltwater crocodiles as well and they are going to be our biggest competitor in the next 10 to 15 years. They do not have to worry about environmental conditions as we do. They have cheaper labour, less infrastructure, less bureaucracy and lower licensing fees. Our licensing fees to run our farm are about \$2,000 to \$3,000 a year just on the farming side.

CHAIR—Thanks very much. Has anyone else got any further questions?

Senator O'BRIEN—Could you advise the committee of the optimum time between collection and delivery if you are going to take eggs from the wild for ranching? Is there an optimum time?

Mr Freeman—Crocodiles nest over about five months. You find, once the ranching program gets established, you develop a good knowledge of where crocodiles will nest and you can use satellite navigation, GPS, to identify where you have found a nest. You usually find the females will nest quite close to that spot in future times, so you develop a database of good nesting areas and you use your GPS to get back to the areas where you found good nests.

Senator O'BRIEN—When you collect the eggs, you have to get them into the incubator. How long can you hold them?

Mr Freeman—As long as you can keep them warm—24 hours or maybe longer. It depends on the temperature control. To incubate the eggs, all you have to do is keep the eggs still and keep them at 32 degrees with high humidity. You can achieve that in an esky with a light bulb or you can achieve that in a \$10,000 incubator. It depends on the logistics of it. You usually find that for egg collection you just use an esky. You take your eggs out and collect the nesting material. That holds enough warmth and is good enough for at least 24 hours. After that, you have to use some artificial heating.

Senator O'BRIEN—Tell us about the feed source for your farm.

Mr Freeman—The majority of the feed—chicken heads, necks, frames—comes from the abattoirs for chicken products. We are utilising a product that was once a waste product. Also we use a lot of kangaroo meat. We buy that through pet food abattoirs. We

get spent layers from egg poultry farms and some feral pig meat. For the animals grown for meat and skins, the food must come from approved sources. You cannot feed feral pig to animals destined for the table. The meat must come from approved abattoirs.

CHAIR—Is all the crocodile meat for human consumption?

Mr Freeman—Yes.

Senator O'BRIEN—Can you give the committee an estimate of how much your farm puts back into the economy using what would otherwise be waste meat product?

Mr Freeman—The food bill is growing all the time. Even with our small population of crocodiles, I am just taking a guess off the last set of financials, but it is about \$60,000 to \$70,000 a year that we would spend on livestock feed.

CHAIR—I think that is all, Peter. Thank you very much. We are looking forward to coming out tomorrow. We found the inspections we did yesterday very helpful in putting some flesh, if you like—excuse the pun—on the bones of the inquiry.

Senator HEFFERNAN—I have one question before you go. Do you have any dialogue with people who are opposed to what you do, like the Australian and New Zealand Federation of Animal Societies? Do they ever come out and have a look?

Mr Freeman—No.

Senator HEFFERNAN—No dialogue at all? Do you think it would be useful to have one?

Mr Freeman—I do not know. I have had no contact with them, so I do not know what their views are or how they feel about this.

Senator HEFFERNAN—Have you read their submission?

Mr Freeman—No, I have not read their submission. Between the department of environment and the department of primary industries, both have concerns about the welfare of the animals in the husbandry site and also the processing site. We have to operate under codes of practice for the department of environment on how we farm our crocodiles. They pick up welfare issues, and things like minimum standards for fencing, water, water depth, water volume, pen size, feeding times, and staff experience. With the processing, they look at how the animals are processed, how they are slaughtered—it must be done humanely—and time frames. The department of primary industries has also looked at the welfare side of it, and they have actually had some contact with welfare groups, but not without the industry.

CHAIR—Again, Peter, thank you very much and we look forward to seeing you tomorrow.

[9.37 a.m.]

NEILAN, Mr Alan John, Company Secretary and General Manager, Edward River Crocodile Farm Pty Ltd, c/- Post Office Pormpuraaw, Queensland 4871

CHAIR—Welcome. I think you can see we are a reasonably laid-back committee; we are not an inquisition. Do you have anything to add to the capacity in which you are appearing?

Mr Neilan—I am also the commercial manager of the Pormpuraaw Community Council, which is an Aboriginal local authority on Cape York where our farm is located.

CHAIR—If you wish to make an opening statement, we would be very happy to hear it.

Mr Neilan—Firstly, I will give you a little bit of history about Edward River Crocodile Farm. Applied Ecology was a Commonwealth commissioned organisation back in the late 1960s, early 1970s, and that organisation looked at three species: crocodiles, emus, and seawater turtles. Of those three species, the only remaining Applied Ecology structure that is left is the Edward River Crocodile Farm. The other two have been disbanded.

We went from that position in the early 1970s and trialled ranching and did a lot of things, and before too long the Aboriginal community had some ownership problems, so in the mid-1980s the company became a fully fledged proprietary limited company. At that time, the farm was producing about 5,500 eggs, all from captive breeders, and about 3,000 hatchlings for the industry. Those hatchlings were sold to other farms, or they were grown out for skins for their skin product.

At that time, the only skinning and meat facility in Queensland was at Edward River. It also employed a number of people. That facility has now closed down. In 1997, if you have an Aboriginal controlled and owned company, we have another asset, which is the Cairns crocodile farm. It is a major competitor to my mate who was just here before.

CHAIR—Friendly competition.

Mr Neilan—It is friendly competition. The premier farm in Cairns, the Cairns Crocodile Farm, produces about 500 hatchlings a year compared with our 3,500 at Edward River. It also acts as a wildlife park and tourism facility. It is in fact owned by the Edward River community. From the outset, not many Aboriginal communities can boast of having assets outside their local authority area. It is not something that is common in Queensland. Most communities are struggling with infrastructure on their own community. The company has built up those assets over 10 years.

We produce about 140 nests in our compound lagoon area, which is a natural environment, although it is fenced. Those animals are grown out to about two foot long. They are then sold on contract to our Cairns farm. The Cairns farm is leased to another operator, obviously. That operator then grows out the animals until they are of a size which is adequate for skinning or orders. They then slaughter the animal at their own slaughterhouse. There is another facility in Cairns which slaughters those animals. That slaughterhouse actually has the capacity to slaughter about 3,000 animals per year. Depending on whether they are getting outside contracts, that is a little more than the other facility.

The income from the Redbank facility is about \$150,000 per year to our community. That includes leasehold and some gross turnover. So we are making that asset work for us. At this stage, there is no intention to sell it. To give you an idea of the current research development, which has been all industry driven, at the moment, the Department of the Environment employs a biologist. That has only been a recent occurrence. Until then, the Department of the Environment was basically a licensing facility. There was very little research undertaken by the environment department of their own accord.

The Department of Primary Industries and Fisheries, which I know has made a submission—Bernie Davis will be here later today—also provides some research into nutrition, grow-out rates and feed analysis. It also has a major team for the industry, which gives us support services in analysing fungi control, bacteria and some embryology problems. We tend to look at the Department of Primary Industries and Fisheries in Queensland as probably the authority that will take over some powers or recognition of the industry now that the animal is certainly a commercial species and no longer under threat, so to speak.

The University of Queensland, at our invitation, also commenced a review of our farm late last year because of our fertility problems. We secured an ARC grant, when it was still the ARC program, to kick off a genetic analysis study. That genetic analysis study commences this coming breeding season. We are actually hosting a lady who was a director the Palawan Crocodile Institute in the Philippines. She will be working with our farm to look at genetic traits in breeders to find out whether the lagoon system works or whether we should have smaller pens with a smaller number of breeders per pen so that you can track through your genetics. That is quite common in other intensive livestock operations.

There is also a new SPIRT application. SPIRT replaced the ARC research grants. We are a major industry partner and co-signor of that application. That SPIRT application is looking at a number of areas of the industry. This has been industry driven. The industry is worried about egg fertility in the wild. The industry is worried about the nutrition problems of breeders, and peaks and lows in their breeding cycle. The industry kicked off the SPIRT application with some other joint educational institutions, such as

the James Cook University and the University of Queensland. We also have the Department of the Environment and the Department of Primary Industries as co-signers to that application.

I spoke earlier about fertility problems. There are some problems with data when you are comparing the so-called fertility levels of animals in the wild with those of animals in captive breeding programs. I will quote a couple of figures. In the five years leading up to the 1993-94 season, our fertility ranged from 58 per cent to 75 per cent. Fertility means the removal of fertile eggs from the nest. We look at the egg to find out whether there is a band or air sac within the egg. That is judged as being a fertile egg. When those eggs were withdrawn from the nest, we were finding that, at a low point, 40 per cent were not fertile and 25 per cent were not fertile. The PNG farming figures from 1987-92 show that 51 per cent was the low mean and 77½ per cent was the high mean. In the Territory, from the 1986-93 breeding season, 62 per cent was the lowest fertile season, and 74 per cent was the highest fertile season.

There is some assumption at the moment that in the captive breeding program—I make the point again that the Edward River crocodile farm is the largest captive breeding farm in Queensland—our fertility rates are dropping. But they are by no means way off what is occurring in the wild. The Northern Territory data, I suggest, is also somehow corrupted. As they are collecting eggs from the wild, they are building up a database of known fertile localities. On their quota system, they are not going to waste a Jet Ranger helicopter going out at \$900 an hour to localities that are infertile. My suggestion, even with respect to the PNG figures, is that there is not really at this stage a known fertility rate. You are really judging data that comes from handwritten cards of the early 1980s to observations and some data from other farms.

There is also some genetic connection. If you find an infertile nest which has a large number of infertile eggs and some fertile eggs, they are going to be incubated. But there is a higher probability that those animals will not survive. So some nests that are fertile may be taken, but they do not actually end up as hatchlings for the industry. So if you are going to look at fertile eggs being withdrawn from the wild, and if they are coming from an infertile nest which has a high proportion of infertile eggs, they will not assist the industry to a great degree anyway.

At the moment, between one and two per cent of eggs which do hatch in the wild survive. I recognise Senator Heffernan's earlier reference to the ANZFAS submission and the suggestion about runt crocodiles that are genetically inferior animals not growing beyond about 12 inches long. In the captive program, they develop a second scale skin, which is useless as a commercial item. It can be used as a taxidermist product, but that is about all. Those runts would not survive. I pick up that one point: eggs that do hatch in the wild are lost anyway.

As far as legislation is concerned, I note Peter's point about conformity to state

laws. If you have a rogue crocodile bypassing the lower Gulf border and going up through the Territory, when it passes one part of the beach, it becomes the jurisdiction of another state. That is ludicrous. It means that the people who pass on one side of the border can do what they want but that people on the other side cannot. Animals are moving all the time.

We do not believe that ranching, from our viewpoint, will be successful for a major skin trade. The major locations of populations of animals on the western Cape are the Wenlock system catchment around the Weipa area and the lower area of the Mitchell and upper Mitchell areas down towards Kowanyama. There are large animals in the Norman Nassau basin near Normanton. There are very few small animals, which suggests that just about all their nests, if there are any, are being wiped out, or the large animals you see are all males, not females.

Ranching was attempted in the early 1970s at Edward River. We released hundreds and hundreds of animals into the wild system. Basically, if you do not have the habitat for those animals to survive in, the ranching of large animals will not occur in Queensland. You just cannot toss 1,000 animals into a river, turn around two years later and say, 'I'll pull 1,000 animals out and we'll skin them'. From our viewpoint, that is just not going to work.

Our view of ranching is that we think that the harvesting of eggs is fine. That is going to bring back value to Aboriginal communities, and in particular to those two areas I mentioned. Once the database of where the nests are located has been built up, it will also give some income to the traditional land-holders of those areas.

But the nest numbers are not there in comparison to the Northern Territory. The number of mature animals in Queensland is just not there. Peter mentioned the figure of 50,000. If you walked out after the nesting season you might well find 50,000, but remember that only one per cent of hatchlings survive a short period of time after hatching. Most of them are dead. Most of them are eaten—they are gone.

So, sure, there can be ranching for breeders—withdraw some larger animals if you want to increase the genetic pool in captive breeding programs—but I have hesitations about the release of animals in the hope of restocking water systems and then going back and capturing them two years later for their skin product.

The other thing you must remember is that on the western side of Cape York, with the exception of about three rivers which are closed to commercial fishing, you have 110 or 115 commercial fishermen operating barra line and crab licences. If you toss 1,000 crocodiles into the Mitchell River you can bet London to a brick that most of them are going to end up back down in the nets; and there is nothing commercial fishermen can do about that apart from removing the carcasses and stitching up the nets.

That is our viewpoint on ranching. I think ranching as far as Aboriginal communities are concerned means income for bringing the eggs back to incubators. This is exactly the discussion I had with Minister Trevor Perrett when he visited our farm just last week: that we need recognised, experienced egg handlers. Our people have been in this industry for 25 years, so they know what they are doing. We do not want people gallivanting out, collecting eggs and chucking them into an orange box, bringing them back and then expecting a royalty for them. It has to be done by skilled, licensed people, and most likely that licence should be connected to a farming licence or to some state act.

The problem with egg collection is that the territory has a massive number of eggs. We come back to the territory and say, 'Let's model something on what is happening in the territory.' My feeling is that we should not model something on the territory. We have to go with what habitats we have in Queensland and look at the Queensland issues. In the territory they embark on their egg collection within two weeks of nesting. They do a big run out to recognised sites then, and they do another run towards the last two weeks. That is the fragile period of egg collection.

The egg has to be removed soon after laying. We remove most of our eggs within the first two days of them being laid. If the embryo is already attached to the shell and the egg is not transported at the same level and direction that it is put into the incubator, the egg will die: the embryo will suffocate. Primarily you are looking at early collection or late collection, but you are not gallivanting out into the river system every five minutes of the day looking for eggs, because commercially it is just not viable. You are not going to find that number of nests on the west coast of Cape York. There are certainly nests there, and I know from observation that in our local area we have a number of breeders in our rivers, but in most of those nests not many are hatching. Most of the eggs are either removed by goannas, snakes or feral pigs, or high tide kills them. Not many of them are hatching, and that is obviously a loss of income.

One other thing I come back to is that the CYPLUS report stage 2 is out in draft form, and it brings us back to the bottom line of sustained economic development for Cape York Peninsula. One area is, of course, making use of nature's bounty. As far as our communities go, that CYPLUS report is going to be a blueprint for where we are heading in the next 10 or 15 years.

The other report I will mention is the FNQ Regional Development Network's lower gulf report, *A path to the future*. I notice Darren Cleland is here this morning, and he will no doubt speak to that but, after quite a bit of consultation over a period of time, that report also looks at egg collection as a source of income for the cape.

Communities are now struggling with the fact that they cannot afford to run infrastructure and programs. We are really looking at economic development. We think egg collection will supplement our current program but we do not think it is going to be the be-all and end-all and we will maintain our captive breeding program. Those are the

only notes I have, so I am willing to answer any questions you would like to ask me.

CHAIR—Firstly, SPIRT stands for what?

Mr Neilan—SPIRT stands for what replaced ARC. ARC was the Australian research collaborative program. SPIRT is the—

CHAIR—I am sorry; I did not mean to put you on the spot.

Mr Neilan—Yes. I am just trying to think of the acronym now. It is industry and research—I have no idea; I am sorry.

CHAIR—That is all right. CYPLUS is Cape York—

Mr Neilan—Cape York Peninsula land use study.

Senator COLSTON—I have a basic question. I think I know the answer, but let me confirm it. I notice there is a difference of opinion about ranching. That does not worry me at all because unless there is a difference of opinion people are not going to try different approaches. I can understand how you muster sheep and muster cattle—and we do not call them ranches here; we call them stations—but how do you muster crocodiles on a ranch?

Mr Neilan—It is difficult.

CHAIR—With great care.

Mr Neilan—At the moment an animal which you have in a captive grow-out facility is probably going to cost you about—without giving too many secrets away—\$120 or \$130; that is, if you have secured the hatchling from your own farm. You are selling that skin or that animal at the farm gate for about \$230. There is the margin. The reason it did not work when they did it in the late 1970s as a program was because you have no control over the environment. You virtually have to go out and either net them in webbing or use a harpoon barb and barb them and bring them into a boat.

The other hassle you have got in thinking that you are going to take them is that you probably are going to have to put them into a farm situation anyway because, if they have got any fungus or spots or scratch marks or whatever on their hide, you are not going to be able to abattoir or slaughter that animal straight away anyway because you are going to lose about 60 per cent of its value. It is a pretty messy way of going about farming.

You have got no control over the environment you are working with. Let us say that you have a relatively closed lagoon system. You are expecting that environment to

feed those animals you have released there. If they find a waterway they will move down that waterway until they find a location they are happy with. If they were all juvenile animals and you had a rogue big male coasting down the beach and all of a sudden it decided to pull up, that male is going to send all those little fellows running for their lives anyway or he is going to kill them. Those animals would have to be taken out of the system before you released the smaller juvenile animals. It is pretty difficult. You do not have those massive expanses of wetlands in Queensland, of course, in comparison with the territory.

CHAIR—Let us go to a general question that is one of our concerns. In terms of the difference between state and federal authorities and lack of coordination, do you think it would be useful to have uniform national standards applying in terms of crocodile farming?

Mr Neilan—Sure. I think it is going to have to happen, because you are looking at the sustainability of a certain species across states. Regardless of which state government department enacts its own legislation, you need some national framework to work from. If you are looking at porosus as a species, there is some division amongst the pure academics at the moment in knowing how far that porosus species shifts towards south-east Asia. Part of the SPIRT application in pure science funding—it is not industry related—is to look at the genetic sampling of animals through the bottom of south-east Asia. There should be a national framework and then each state by looking at their own habitats and their own population surveys, can then build on a framework of how they are going to manage the species.

CHAIR—In terms of your farm at Edward River, what is your main source of income? Do you have any tourist operation there?

Mr Neilan—No, we got away from tourism. Our premise is that you either run a tourist park and throw chooks in the air and make animals perform or you run a farm. That is why we spent a lot of money developing the Redbank facility. We take visitors through the farm of course, but the sole direction of the farm is to do what we do best and that is look after our breeders and make sure we have our hatchlings ready for contracts. Our animals are sold for the next five years, so we have to make sure we meet those contracts.

I think tourism has developed as a sideline for some of the other smaller parks, because commercially they need that money to come through the gate. We do not, so we have not looked at that as an income source. Our main income is obviously the income we make from the other farm at Gordonvale and also our sale of hatchlings.

CHAIR—So out of Edward River, you are selling the hatchlings?

Mr Neilan—Yes. We have surplus stock which we grow out, which from time to

time we sell in pen lots, depending on how many hatchlings we produce each year.

CHAIR—In terms of animal welfare issues, we got from Peter that there is a code of practice and it is fairly extensive. Do you feel that that is working or are there any issues that the committee needs to be aware of that you would like to signal?

Mr Neilan—There is an accepted code under the management plan which we maintain. There is also an accepted code within the workplace health and safety provisions of the Queensland government which we maintain. A lot of it is industry regulated as far as workplace health and safety goes, but those plans are accepted. We are the main industry organisation in crocodiles.

As to what happens with parks with respect to feeding, I picked up in the ANZFAS application a point where the person preparing the submission mentioned that animals are only fed twice a week, then they had a break and then they went again or something like that. To give you an example, our breeders eat about six kilos of feed a week and they are only fed once a week. We do not go around every day and throw them scraps, because we upset their social behaviour.

We have massive lagoon areas and I will explain some of their social interaction. These animals have been sitting quiet for seven days long, they have worked out their possies, the males have got all their girlfriends in one little huddle and all of a sudden you introduce feed and it upsets all that social interaction. Now if you do that everyday, it is a little mind twisting for the animals and we do not like to do that. We do not have to show groups of people through everyday, so we do not do it. They are fed once a week.

The smaller hatchlings are fed five times a week. The reasoning for that is in case of any bacterial problem or fungus developing in the hatchery. I add that we also agist animals on behalf of other farms and currently we have over 4,000 animals being agisted at the hatchling stage which have hatched from the last season, so there is a fair bit of money under one roof. We feed those Monday to Friday and we have a break on Saturday and Sunday, not because people have two days off or because it is not commercially viable to pay people wages, but because on Monday we found that the smaller animals will take the feed easier with the supplements. If we have to put in some sort of supplement for any bacteria which is occurring, we can pounce on that sickness a lot quicker.

I do not know of any farm which has two days, then a two-day break and then another two days. We find most mortalities are through genetic problems with the smaller animals. Once the animals get to about three foot long, there are very few mortalities at all, not through human intervention anyway.

CHAIR—Have any environmental issues been a concern for you on your farm? We heard from Peter how effluent is treated. Could you tell us about that.

Mr Neilan—Our lagoon area is self-draining. It drains from one pond to another and then to another. That is exactly how we have set up the Redbank facility. Very little run-off actually occurs to the Trinity Inlet because of that. A lot of time and effort was spent looking at the environmental impact from the word go. Local authorities are now very cautious about the expansion of any farms on the east coast because of those problems. The effluent is very nutrient rich. The animals are in a growth pattern by the feeding cycle. Basically, the pens are cleaned daily. That is an important factor on the east coast.

Because our lagoons drain into natural lagoons, at this stage we do not have a concern about that problem. We do have a concern—I brought it up with the Minister for Natural Resources—about water usage. We are looking at our aquifer for the gulf and how long communities can continue to pump out of that aquifer. Crocodile farms use a lot of water. Our animals are all reared in fresh water. At the moment, we have a joint plan with the Department of Natural Resources and the community council on pumping water further inland so that there is no saltwater intrusion. We are located right on the beach.

CHAIR—There is clearly not a very exact science for working out how many crocodiles there are in the wild. Are any government departments using any method of counting, or it is just a guess?

Mr Neilan—It is a bit of a guess. The Department of the Environment has done the east coast down to the Wenlock. It is currently on its last leg, which is from the Norman River down towards Norman and back up to us. It is a guess. A lot of the females are mating from about October and laying. They become quite dormant around that period when they are laying. They are sitting on nests and not moving. They are quite active now because they are looking for sustenance; they are replacing all those fats that they lost. I think it is by observation. That is basically what the DOE is doing.

The SPIRT application looks at a better way, which is through chipping and satellite technology. It is looking at specific populations. Currently, that technology, which is being furthered through the livestock industry, is not really terrific. You can insert a chip into an animal just behind the head. You really do not want it anywhere in the meat because it may intrude into the meat and later become a waste product instead of a valuable piece of byproduct. The wand we need to read the chip has not been developed to a point where you can stand a few metres away from the animal and read its identification number. If we waved a wand near some of our animals, you would lose it. You have to be able to walk through a lagoon and raise it within 20 or 30 metres and then get a reading. Until that technology is developed, it will be really expensive to look at a total population base through satellite technology.

Senator HEFFERNAN—In ANZFAS's submission, which you apparently have read, they say that, as far as they are aware:

. . . no Code of Practice for the welfare of captive crocodiles . . . exists.

Is that true?

Mr Neilan—No, it is not quite true. The crocodile management plan for 1995-97, which is currently in place through the Department of the Environment—it is under review at the moment and will be replaced in December—notes quite an extensive handling and marking procedure for identification.

Senator HEFFERNAN—They say that a code of practice for handling and transportation exist but not for the welfare of captives.

Mr Neilan—If they are looking at feeding regimes, such as what an animal of a certain size should be eating, or what medications we should use, I can say that that is pretty much in-house industry data.

Senator HEFFERNAN—They may be applying densities. I do not know.

Mr Neilan—They may well do. Our links are with major institutions, like the Queensland University and people who have been the chair or members of the Crocodile Advisory Group. It probably comes back to the department of environment, looking at their licensing and visitations to smaller farms, but we have had no problems in the past.

Senator HEFFERNAN—If there is not one, it would be possible to develop one, I take it?

Mr Neilan—Sure. I think most of the industry players would be pretty much on a constant run now as far as density of animals and pen space is concerned as to how much you should have in there, the amount of feed that is going in. The only advantage that we have in Cape York is that our water is warmer and our climate is warmer. Some of the east coast farms might find that the water is cooler and the water has to be heated to a certain degree, maybe, in the enclosed structures for smaller animals—we do not have to do that. Growth rates are certainly different.

Senator O'BRIEN—I just wanted to follow through a couple of small points. You talked about ranching. Could you tell us what you think the potential impact on the crocodile population in Queensland would be of the replication of the Northern Territory situation?

Mr Neilan—First, the knowledge that we get out of the genetic study, with respect to captive breeding, will give us some foundation as a starting point for and against captive breeding. If we find that a third generation female from the initial stock is producing a poorly constructed shell by genetics or has poor fertility capabilities, then obviously the push will be on that we have to improve that genetic pool of breeders.

We could remove mature animals from our river systems just through our community now, with consultation with our people and our local land-holders, without any damage to the numbers at all, because I know through observation that those animals are quite mature and they are getting a bit dangerous. We find that if an Aboriginal community complains about a large animal we are told just to put more signs up and tell people to stay away from it.

If it was surfing at Port Douglas or on Machans Beach, there would be permits issued within two days, but we are not having that same luck with the department of environment, unfortunately. Anyway, I think there would be no impact locally where we are, but you would find that slowly, rogue animals which coast down the beach line would move into those spots anyway.

Ranching, as far as we are concerned, is the removal of eggs. If the genetic study proves that captive breeding is not the way to go over a 25- or 50-year period, then I think we are going to have to look at the program to have the ability to remove mature animals for genetic improvement.

The animals which we started off with—of which only about five big males are left—came out when they were about 10 foot long and maybe 10- to 12-years-old. All of the other animals which we have at our farm have been captive bred; they are our own hatchlings. So the original stock have all gone on. That stock was brought from the Mitchell River and from Weipa and there were quite a few brought from New Guinea of the New Guinea species, none of which survived down where we are. The actual genetic stock we are working with is not from that locality anyway, but because the animals move and drift so much, you really do not know where the original stock came from.

Senator O'BRIEN—One of things that crossed my mind when you were talking about the size of the Queensland population was that, if you took the eggs, given a one to two per cent survival rate, if you reduce the number of eggs, you reduce the number of crocodiles being introduced into the system. Does that have a long-term potential impact on the size of the wild population?

Mr Neilan—The plan would be—and industry has already said we would be happy to do this, along with the negotiation we have had so far—that we would be happy to follow that egg through our system, and we would keep the data as to what nest it came from, the locality and all that sort of business. We would actually put back a percentage of whatever the states or the national framework demanded, but we would put back the animal at a size it could survive at—at three- or four-foot long.

Let us say that there are 50 in the nest. If we hatched 40 and replaced, say, 10 per cent and released four, they would be eaten that day. Regardless of whether they were hatched out in a nest or an incubator, they are gone. So we are happy to replace them at a length where they were going to survive. That would surely guarantee your local

population. A lot of the argument against egg collection has basically been that there is a theory that the animals in one river have a different genetic make-up from the ones which are 30 miles north. And that is fine if you want to continue the academic argument. But the industry can cope with that by replacing them right back to where they came from.

Senator O'BRIEN—And the food source for the Edward River?

Mr Neilan—We buy feral pig from our out-stations and that gives them an income. We go through about a tonne of feral pig per week. We also buy fowls out of a battery farm here in Cairns. We find that the fowls, later in the year, float in water where pig does not. Most fowl lagoons are quite saturated by that point and the fowls float, that means the animals still eat. If you throw the pig in, it tends to sink and they cannot find it, so fowl has become a wet season feed source. We buy chicken necks and heads from pet food companies.

At the moment, we have got a surplus plan arrangement with a factory that has just commenced at Mareeba, the Steggles company. Prior to that, they were being sent from Brisbane. The difficulty with pet foods is that you have to have it cut in a special way so that you do not get too much fat on the necks and the heads. We do not want the lower skin. The company really has to set up to take that order for that particular day and it has to be chilled and then frozen. So there is quite a process involved rather than just backing in a truck and chucking out the offal.

Senator O'BRIEN—I have asked some questions of other witnesses about the amount of money that their operations have put back into industry or the community. Rather than take up the time, would you advise the secretariat sometime of the breakdown? You particularly talked about the feral pig and the amount that you purchased from the communities.

Mr Neilan—And beef—bull meat from out-stations. In regard to employment levels, if you looked at any industry on the cape, at any cattle station that is employing 10 people full time, and took off government services—welfare, health and education services—the list would be very few. Our farm is a major industry 'inputter' as far as those incomes moving around are concerned. If you took out Social Security support and said, 'How many can you really sustain commercially in this community?', we are still a major employer, and that money, of course, cycles around through beef and feral pig purchases.

CHAIR—Thank you very much.

[10.18 a.m.]

DAVIS, Mr Bernard Michael, Manager, Intensive Livestock, Queensland Department of Primary Industries, PO Box 1085, Townsville

CHAIR—Do you wish to make any statement to us?

Mr Davis—Intensive livestock includes the disciplines of dairying, pigs, poultry and what are called the emerging industries—crocodile farming and emu farming. Primarily, I want to talk about the crocodile farming aspect and, to a lesser degree, emu farming. I want to make some statements about the possible farming of birds, in particular finches and that type of thing, of which I have some understanding. I would also like to point out to the committee that I am a member of the project review committee for RIDC, the Rural Industries Development Corporation. That corporation has the responsibility for the emerging industries, so it is looking at the farming of native animals in terms of research proposals.

Senator O'BRIEN—I have a copy of a submission signed by Mr Peucker. In terms of the ranching—that is, the collection of eggs from the wild—he talked about a fee of \$5 per egg, fertile or infertile. This morning Mr Freeman from Cairns Crocodile Farm talked about a figure double that. Do you know where Mr Peucker's figure of \$5 came from?

Mr Davis—That would be an arbitrary figure. It would be a guesstimate rather than an estimate one made on any substantial basis.

Senator O'BRIEN—Okay. Do you know what the figure is in the Northern Territory? I am sure we will get it anyway.

Mr Davis—No, I do not.

Senator O'BRIEN—In terms of the work the department does in relation to crocodile farming, have you been involved in any review of the regulations that apply to crocodile farming? We have had some complaints about the level of regulation of the industry.

Mr Davis—Our department is involved in crocodile research in terms of production. I heard some questions were raised earlier about welfare and those issues. We have some insight into that. Primarily, we have a site at Townsville where the department has invested \$300,000 for controlled environmental housing. We are looking at things like nutrition of crocodiles and feed space, floor space and loading regimes under commercial production.

Senator O'BRIEN—Thank you. That is all the questions I have.

Senator HEFFERNAN—The main objection from the ANZFAS people seemed to be that there was no code, but it is not your bailiwick, so I will present that question somewhere else.

Mr Davis—The other thing the committee needs possibly take to on board is that the crocodile industry is an emerging industry. As such, we are 20 or 25 years behind where poultry and pigs were, and codes of practice are certainly in place for handling those animals. The other thing is that, as far as our department is concerned, no work is carried out with the crocodiles that does not go to an ethics committee on animal welfare within the department. There are safeguards there for the animals.

CHAIR—We have been debating here with the previous witnesses on numbers of crocodiles. I suppose the essential thing is not the exact number but rather that there has been a significant increase in recovery of crocodiles in the wild since the 1970s. Does DPI have an opinion on that? Can you confirm that that is so? Does DPI do estimates of the numbers and how is that done?

Mr Davis—First of all, DPI does not do the estimates. It is DOE that does those. Up to 18 months ago, I was sitting on the Queensland Crocodile Conservation Committee which looked at counting populations and that type of thing. My observation from sitting on that committee is that it takes an eternity to get answers to the questions that you have raised. The primary problem with that area is that there are insufficient dollars to get out there and do the counts. That is one of the major problems. I believe that we are not in a strong position at this time to say just how strong that recovery is. Talking to experienced people in the gulf areas in Far North Queensland, it seems that animals are certainly on the resurgence.

CHAIR—In terms of the CITES protocols, clearly the listing was done in order to help numbers recover. Do you believe that that listing should be continued or has it been downgraded to any extent?

Mr Davis—I am not aware that it has been downgraded. Until we have very substantial evidence that the populations are recovered, I suggest that CITES remain intact. I would support that view.

CHAIR—I do not know whether the DPI has some involvement in this, but certainly the Far North Queensland Network submission talked to us about seed collection and plant production, particularly of native species. Do you have any involvement in that?

Mr Davis—No. My role is in animal production.

CHAIR—Do you know whether DPI has any role?

Mr Davis—I cannot answer that question. I do not know.

CHAIR—Are you or the DPI involved in the kind of research that Edward River is undertaking in terms of genetics and fertility?

Mr Davis—It certainly is. A joint project is being mounted for funding among the University of Queensland, James Cook University, the Department of the Environment, the Department of Primary Industries, commercial people and, in particular, Edward River. It is looking at that problem of infertility. Each group will have a specific role to play.

CHAIR—Alan Neilan spoke about the decline in fertility. In spelling that out a bit, it seemed as though the decline is based on some gross figures and that that may not be so. We were trying to pin that down some more. Are you aware of the ramifications of the fertility program?

Mr Davis—Yes, I am. I have been a party to the discussions on the research proposal. I do not think at this point we can pin it down. Part of what we are trying to do with the research program is to find out exactly what has gone wrong and the extent of that. It certainly has ramifications for that company. If the crocodile industry develops, I see vertical integration happening in that industry over time. The Edward River Crocodile Farm will be the primary source of hatchlings in Queensland, if not Australia.

CHAIR—In terms of vertical integration, what would you include? The captive breeding programs through to slaughter, tanning and marketing? All of those?

Mr Davis—Yes. To some degree, that has already happened. Down the road at Portsmouth, we have a company that has overseas investors involved in that project. Those overseas investors have put something of the order of \$5½ million into that project. Instead of sending green skins offshore, value adding is happening here in Australia. It will become a specialist industry, I believe, over time.

CHAIR—Is there still a demand for the product, or is there a danger of over-production?

Mr Davis—There is still a demand for the product. Our main competitors are alligator skins. They are certainly producing a lot of them. Changes in tastes are likely to cause problems for the industry rather than over-production. Changes in taste mean smaller purses, for example. You are then cutting two purses out of one skin, and that type of thing. You double your production overnight if you change your cutting.

CHAIR—Fashion is a very hard market to control, is it not?

Mr Davis—Yes.

CHAIR—Mr Freeman from Hartleys Creek told us that the main market is Japan. What other markets are there? I presume there are domestic markets as well.

Mr Davis—It is mainly an export industry. We have to look at this from two points of view. There are skins and meat. The crocodile industry is primarily interested in producing skins. The bulk of those skins—probably 95 per cent plus—are exported. The meat side of it is a domestic exercise. We are currently importing about 80 tonnes of meat per annum for Australia. We cannot satisfy the demand at this stage. I believe that, as the industry expands, we will eventually export crocodile meat. I think the industry will grow.

CHAIR—There is no exportation of live animals, I presume?

Mr Davis—No. We cannot do that. Under the CITES agreement, my understanding is that we can only export animals for zoological purposes, not commercial production.

CHAIR—Do you believe that there is adequate legislation and regulation for the crocodile industry in the state? Because crocodiles and animals do not observe state boundaries, is there a need for some national standards?

Mr Davis—My observation is that the industry is adequately catered for in terms of state legislation. I believe that there is a case for legislation which should look at the industry on a national basis. I say that because research funding is delivered on a national basis. The industry perceives itself to be regional. In terms of actually surviving in international markets, it will have to take on a national focus.

CHAIR—A certain amount of frustration was expressed by a couple of the earlier witnesses. But you are saying that there is a fair degree of cooperation between the environment department, DPI and so on. Cross-department rivalries would not happen in Queensland, would they?

Mr Davis—Certainly.

CHAIR—You do not have to answer that question. But do you, in a general sense, have any frustration with some of the national, state or cross-department boundaries? Do you think the cooperation is not too bad?

Mr Davis—First of all, cooperation is improving dramatically. People in research agencies see the need to work together. We do not employ a crocodile biologist, but we have a memo of understanding with the Department of the Environment, which has crocodile biologists to work on our projects with us. So there is good cooperation. That cooperation extends across other agencies and into the private sector. The thing that I feel frustrated about is getting answers to wild populations. In my view, that is not the fault of the DOE in that people are not interested and not prepared to get out there and do the work. They are hamstrung by a lack of finance.

CHAIR—Yes. That seems to be a fairly common cause. We were quoted SPIRT

before. We are not sure what it means. Do you understand it?

Mr Davis—No. I should, but I cannot remember what the acronym stands for.

CHAIR—The committee is not being pedantic. It is just that, when we come to write reports, we need to be able to explain it. That is all right. We will keep asking, and I am sure that we will get an answer somewhere along the line. They are probably the main issues that we wanted to deal with, unless any other members of the committee have questions. We might get an early mark, then. Thank you very much, Mr Davis, for your attendance. We know you had to come here, but we are not sure where from.

Mr Davis—Townsville. I flew up this morning. I have produced a private submission that covers other species. I will leave it with the secretary. It expresses some views about emus, small finches and that type of thing.

CHAIR—We are very happy to receive this submission. If there is any verbal information you want to give us, we are happy to take it.

Mr Davis—I am basically saying that I believe these things can be farmed on a sustainable basis. We really need to look at any activities in these areas through fairly strict government regulation and decent research. That is the thrust of this document.

I am also saying that conservation on its own cannot protect the environment and the animals in it simply because the job is much larger than the public purse that has to be drawn upon to service those things. I am suggesting that we need to be in partnership with landowners on exercises. Take crocodile habitats as an example. We see crocodile habitats being drained for beef activities. It is marginal land. A lot of it reverts back because they cannot make a dollar out of it. If we protect that habitat and we let people harvest from those habitats under strictly controlled conditions, we preserve the habitat and the animals. I recommend the activities of the Northern Territory to this committee. I think they have moved in the right direction.

CHAIR—We will be very happy to receive that because, as you are probably aware, this is one of the most controversial aspects of this inquiry. We are trying to get both parts of the debate on the table so that we can compare the evidence. So that will be a very helpful submission.

Mr Davis—I do not see that there is conflict between commercialism and conservation. They are part of a continuum, and I do not think they are on diametrically opposed ends of it. I have an interest in the environment. One of my hobbies is bird watching and that sort of thing. I do not subscribe to the idea that we should just go out there and take everything that is available.

CHAIR—You will probably be interested in the evidence we got from a witness

we spoke to yesterday morning. All of us would like to talk to him, Professor Moll, again. He said, out of his African experience, that when they gave land holders ownership of the native wildlife, that changed attitudes significantly in terms of conservation.

Mr Davis—I suspect that it will here, too.

CHAIR—The committee is happy to receive that written submission. We thank you very much. There will be a break until 11 o'clock. Thank you, Mr Davis.

Short adjournment

[10.59 a.m.]

CLELAND, Mr Darren John, Development Manager, Far North Queensland Regional Development Network, PO Box 3065, Cairns, Queensland

CHAIR—Welcome, Mr Cleland. Do you wish to make an opening statement?

Mr Cleland—Thank you. I welcome this opportunity to give evidence to the inquiry on the commercial utilisation of Australian native wildlife. Obviously, the network strongly supports the commercial utilisation of Australian native wildlife provided it is undertaken in a sustainable manner, and we believe that it can be undertaken in a sustainable manner.

In describing the Far North Queensland Regional Development Network, we are an organisation that has been established essentially to encourage and enhance a cooperative approach to economic development in Far North Queensland. Our organisation has evolved since 1993. Members of the organisation come from industry, regional development organisations, local government, trade unions and Aboriginal and Torres Strait Islander organisations.

In my position at FNQN I have recently been involved in completing two economic development strategies, one for the Gulf of Carpentaria region and one for Cape York Peninsula. Therefore, the evidence that I am giving you today relates primarily to these parts of remote northern Australia.

The strategies provide recommendations on a broad range of issues related to economic development, everything from infrastructure to animal production to local enterprise opportunities and to marine industries. The brief was all-encompassing and covered a broad range of areas. While I do not profess to be an expert in commercialisation of native wildlife I do believe that I have a contribution that is worth while for the inquiry.

In developing the strategies, we undertook significant community consultation in Cape York Peninsula and the gulf, and we believe that the strategies underpin the region's aspirations and vision for the future. Throughout the consultation process, native wildlife production came up time and time again as being an economic development opportunity. In essence, I am trying to say that this is not just coming from me, this is coming from the people of Cape York Peninsula and the gulf.

I would also like to paint a picture of the peninsula and the gulf region. The socioeconomic indicators for the peninsula and the gulf, particularly amongst indigenous people, are embarrassingly different from the rest of the nation. Per capita incomes are amongst the lowest in the country. Life expectancy is about 30 to 40 per cent lower than the national average. Dependency on welfare rates are some of the highest in the country.

Literacy rates are some of the lowest, and unemployment is immeasurably higher. It is very difficult, even in my position, to access correct data on unemployment rates, particularly in the individual Aboriginal communities.

So the low levels of intellectual capital in those regions and the low level of community involvement created by the poor social infrastructure that they have got up there, the sparseness of the communities, and the distance in conducting business all pose significant capacity and capability constraints upon economic development and trade. In essence, there are very few economic development opportunities readily available to the people of Far North Queensland, and I think that the inquiry should appreciate that. However, native wildlife production may be an opportunity in the short to medium term for the local people, we would hope.

I would like to address the commercialisation of native fauna and then follow that with consideration of flora. Essentially, animal production on the peninsula at the moment relies on people in the pastoral industry. They are experiencing low financial returns. They lack technical support, but the pastoralists in the peninsula and the gulf area are intent on persevering with their industry and, hopefully, live cattle exports will provide them with some future. However, some people do have their doubts with regard to the long-term sustainability of live cattle exports and, should that happen, the pastoralists would be facing a catastrophic situation.

I might move on to fauna. In undertaking the strategies I had strong involvement with the Cape York Peninsula Land Use Strategy. Most of the references I will make are towards the peninsula, not because the issues are different in the peninsula to the gulf but mainly because the CYPLUS process has given us information which is not readily available in the gulf. As part of that CYPLUS process, fauna distribution modelling was taken. We have current up-to-date data on species of birds, amphibians and reptiles on Cape York Peninsula, and we are probably fortunate in that it is one of the few regions in Australia that has such extensive information available.

On Cape York Peninsula, there are 427 species of bird or more than half of the 848 recorded species in Australia. Of these three are endangered: the golden shouldered parrot, the gouldian finch and the red goshawk. A further 14 are rare and another seven are vulnerable. Surely some out of the remaining 403 must lend themselves towards commercial exploitation?

That is not to say that I believe the inquiry should discount those rarer species. The rarer the species, the higher in value it is. There is the benefit of being able to breed up those rarer species to return them to the wild and therefore build up numbers, particularly of species like the palm cockatoo and the eclectis. They are fine commercial species which attract significant prices.

For birds that are native to the cape at the moment, I will just quote you some

prices in the US. This is primarily for the pet market. Sulfur crested cockatoos currently go for anywhere between \$US1,100 and \$US3,000, rainbow lorikeets go at \$US450, and galahs at \$US1,900. There is significant value in the products in the region.

Further to this, I will use the United States as an example because it is probably the biggest market and the most well established in this type of trade. If you can train up a bird to a level where it sits on your hand, you can add another \$US600. You are essentially value adding to the product that you have. It is not beyond the realms of possibility to see a day where we have people in remote communities hand rearing birds and teaching them how to talk. For every word they can say, you are probably looking at another \$US500.

CHAIR—In which language?

Mr Cleland—We could do it by tape. Birds probably are the most glaring possibility. Reptiles are popular for pets. We can use their meat, we can use their skins. Some reptiles have aphrodisiac qualities. Surely, out of the 206 species of reptiles on Cape York Peninsula, some are open to commercial exploitation.

There are insects. Surely one of the members of the committee at some stage of their childhood had a butterfly collection. It is strange when you think about it, but many people the world over continue this pursuit into adult life—no offence to Graham Wood and the insect breeders. Seriously, there are 695 species of insects on Cape York Peninsula. Surely some of them have some commercial value and can be harvested or farmed in a sustainable manner.

Another area I would like to touch on in relation to fauna is that of game hunting. Game hunting is certainly an industry deserving further investigation by the committee, targeted both at native fauna and feral game. I understand feral game is not strictly within your terms of reference but, in relation to feral pigs, it is beyond me why we are not taking international tourists into our national parks to hunt feral pigs, solving a serious land management problem that prevails at the moment and does not look like being solved in the near future.

I put to you: what is worse than catching a marlin or shooting a crocodile? Serious concerns exist over the marlin stock, yet we continue to catch them. In some remote communities, large crocodile populations are really posing a serious safety concern. As was stated earlier, it is easy to get a crocodile removed around Cairns, but if you are living at Pompuraaw or Lockhart River or somewhere like that, the Department of Environment are just not interested at all in moving those crocodiles. Further to this, I cannot see marlin being farmed in my lifetime, yet crocodiles are being farmed quite successfully at the moment.

It is obvious that in the near future we are going to have to consider seriously

possibly culling crocodiles. If that were the case, wouldn't we be better off seeking international tourists and asking them to pay a considerable fee for the pleasure of shooting that crocodile and taking it out of the wild? Even if we do not require a cull, there is still an argument that whatever is taken out of the wild can be replaced due to the fact that they are being farmed.

By combining crocodiles, birds, kangaroos, buffaloes, wild boars, dingoes and cats, we are in a position to provide our own unique hunting experience in Australia. Even more extreme, Bruce Davidson may even be on a winner with the rhino project, given you can hunt gazelle, zebra, impala and Himalayan tar in Missouri. Hunting tours are arranged at all corners of the globe. It is big business.

Without a doubt, the US is the biggest market for hunting. Here are some interesting figures. Hunters contribute \$US14 billion to the US economy every year, supporting 380,000 jobs. Depending on what you are hunting, you can pay anywhere between \$500 to \$3,000 for a four day hunt. There is a huge market out there that I am sure that we can look at accessing.

Going on to flora, I suppose the essence of my argument as it relates to flora essentially goes back to seed collection. Over 950 kilograms of seed have been collected in Cape York Peninsula over the last five years, with an estimated value of \$590,000. The main species collected is mangium from Ayton, Iron Range, Pascoe River and Shellburn Bay. The mines collect a lot of seed as well. Cape Flattery collects about 100 kilograms a year; Comalco collects about 240 kilograms a year—and they are recorded. Some Aboriginal communities collect seed as well—acacia and grevillea mainly. Napranum collect about 200 kilograms of seed a year. Two hundred kilograms at Napranum and Mapoon around Weipa, essentially for Comalco. They are not actually recorded.

CHAIR—Is that for rehabilitation, is it?

Mr Cleland—Yes, essentially for rehabilitation, but there is still some seed being taken out for commercial purposes. Overall, the peninsula is a valuable source of seed, and it is an industry that we have really got to look at expanding on.

The problem with seed at the moment is that no work has been done on what is a sustainable level of harvesting seed in Cape York Peninsula. The CYPLUS process has come up with a recommendation that it be set at a limit of around 200 kilograms per annum. Currently, on the figures that I gave you in relation to the mining companies, they are obviously taking out more than double that in a year as it is at the moment. It seems to me that we are taking a step back.

Another area which deserves attention, particularly as an opportunity for Aboriginal communities, is the area of bush foods and medicines. It is a growing market, the demand is there, and there are communities that are making steps towards establishing viable

enterprises. Coen is probably one example where they have got a business plan, their market garden is established and now they are really moving into traditional foods.

Just to make some points in conclusion, we see the major impediment to developing the industry relates to legislation. I believe we need changes to CITES, we will have to work on trade restrictions within importing countries, and the wildlife protection act will have to be changed.

The development of an industry and commercialising native wildlife I believe would serve to end the illegal trade in native fauna and flora. This, however, could lead to a significant reduction in market prices. Obviously, such an industry would need strong regulation, both from a conservation perspective and from a market perspective. We would also advocate that any industry that involved utilising native fauna or flora would require at least a 50 per cent involvement by indigenous people. We would hope that partnerships would then be developed between traditional landowners and pastoralists in areas like the peninsula and the gulf. It gives them an opportunity for diversification.

We would advocate that most commercialisation would involve ventures initially accessing their breed stock and some product from the wild. The farm product would then be sold or, depending on how it was harvested, placed back in the wild. With commercialisation I believe there is a conservation argument. It should provide for good populations of various species through breeding and replacement. As a licence requirement, possibly rare and endangered species may have to be collected and bred to allow repopulation in their native environment. Without any doubt, the commercialisation of native wildlife can be undertaken in a sustainable manner.

Commercialisation of native wildlife will also provide a significant income for natural resource management. It is a fact that the resources allocated to natural resource management in Cape York Peninsula and the gulf are way below any reasonable level of being able to achieve anything out there, I believe. In the United States, to use that as an example again, for every dollar the average taxpayer spends on conservation in the United States your average hunter spends \$9.

The rural sector is in need of opportunities for diversification and new animal and plant industries. Development of these industries could generate significant economic, social and environmental benefits for the rural sector. Within Aboriginal communities, economic development opportunities are limited, and the utilisation of native flora and fauna really poses a significant opportunity for these people. The government must ascertain the sustainability and viability of potential native industries before this proceeds, of course. I know I went a lot over the five minutes, but I did not want to miss anything.

Senator O'BRIEN—Can you tell us any more about the native timber species that have been plantationed at Weipa?

Mr Cleland—At the moment the major species are mangium, *camaldulensis*, *crassicarpa* and *auriculiformis*. I am not very good on my Latin and, as I stated earlier, I am not an expert on native wildlife. But the majority of that is mangium, which is the mainstay of the afforestation program and mine rehabilitation.

CHAIR—Can you give us an idea of what mangium is?

Senator O'BRIEN—I was just about to ask: what is mangium? Is it a large tree?

Mr Cleland—Yes, a large tree. I do not know how you would describe a mangium. It is like an acacia.

Senator O'BRIEN—Is it being developed with a view to some specific use?

Mr Cleland—No. It is purely and specifically for rehabilitation. There is another issue in relation to forest products and horticultural opportunities in the Cape York Peninsula which I think has been addressed in the CYPLUS process. But certainly the government needs to look at it further, because there are some prime pieces of land there that lend themselves to farming and forestry. Yet I fear that through the CYPLUS process we have to be sure that those industries are addressed when they are doing the natural resource assessment of Cape York Peninsula.

I have this fear that the natural resource assessment of Cape York Peninsula may just go back to looking at conservation values in the pastoral industry without addressing all these other potential industries. The industry may not be there in 10 or 15 years, but, if the land is protected for an economic use, it may be there in 30 years when it is viable to do it. Weipa is a good example. I am probably getting off the subject, but in the Weipa area there is lots of land suitable for rice production. Farmers in North Queensland have had a horrible history as far as rice production is concerned, but in 30 years time there may be significant shortages of rice in South East Asia. In close proximity to Weipa you have a port and you are at the market in a couple of days. I am getting off the track, but there is land there that is a resource.

Senator O'BRIEN—Rice is definitely not native wildlife, but I understand what you are saying in terms of the development.

Mr Cleland—But the native wildlife may have to be sacrificed to address an economic opportunity; I suppose that is what I am saying.

Senator O'BRIEN—Getting on to the question of native birds and the supply of an overseas market, we have had some submissions about the current limitation on the export of birds. But are you saying that birds should be taken from the wild for export?

Mr Cleland—Initially for brood stock, but any proposal I believe at the end of the

day would rely on breeding. Initially you may have to take some stock out of the wild to commence your market and access your market, but with a view to taking brood stock, building up a flock and then being able to sell that bird that was raised in a domestic environment.

Senator O'BRIEN—Yes, we have received some very interesting evidence about the commercial breeding of native birds. In all cases in the submissions that we have had they have been from domesticated stock. So I was interested to see whether you were departing from that, because there are already birds which you have described—and eclectis was one of the species you described—which is commonly held in captivity for breeding at the moment.

Mr Cleland—It is certainly not a new industry. In the United States they are probably the most efficient breeders of Australian native birds in the world. If we were to look at establishing an industry, I believe we could possibly learn a lot from those existing breeders in the United States.

Senator O'BRIEN—Are you suggesting that there should be some system of licensing indigenous people to gather some of the species from the wild for the purposes of establishing breeding colonies?

Mr Cleland—Yes. I cannot reinforce strongly enough the fact that I believe that any commercialisation of native wildlife should allow the majority involvement of indigenous people. The economic situation of your average Aboriginal community in Cape York Peninsula is quite sad. There are not many opportunities and this is one opportunity that is really staring them in the face. It is one which I believe indigenous people have had a long connection with. It is part of their life; they have that link with the land and with the wildlife.

Senator O'BRIEN—In terms of the hunting tour option, are there any special constraints that would apply to that, given changes to gun laws?

Mr Cleland—I did not mention the gun laws, but if we were to promote an industry like that, we would have to address how we would grant a licence to a foreign visitor. It may be a simple matter of establishing some protocols between the countries that the hunters are coming from and accessing their records to expedite the process. It takes now about seven months before you finally get your licence. A procedure would be needed so that it does not take that period of time for those people to be able to access a licence. I believe that, through the right checks and balances, surely legislation could be amended to address that situation.

Senator O'BRIEN—I suspect that it would be much more controversial to propose the hunting of native animals than it would be to hunt feral pigs. Are there any examples that you can give where the hunting of feral animals is encouraged by this hunting tour

type arrangement?

Mr Cleland—Definitely, but I think to provide a real hunting experience you have got to offer some big game as well and the most obvious one is crocodile. People are not going to travel to Australia just to go out to hunt a feral pig and maybe shoot a feral cat. They have really got to have that opportunity to hunt some game.

In the United States, the way that they have established their game parks over there has made them basically separate entities. They do all of their own breeding. If their breeding program is not successful in a particular year, they will take that particular beast off the hunt for a period of time. When you are hunting a crocodile you are paying a premium price for that as opposed to hunting a cat. We have really got to bring in that high-value end of the market.

Do not get me wrong—I do not really enjoy hunting. I have hunted pigs a few times in my youth and it has never really appealed to me, but I think we have to accept that there is a large market out there. We are essentially carnivores and we should try to take advantage of that situation.

CHAIR—Do live cattle exports go through Karumba or where?

Mr Cleland—Essentially the majority of the stock goes through Karumba, although about 15,000 head are going out of Weipa at the moment. Weipa I do not believe will develop a significant live cattle export. They do not have the volume of cattle to access and transport is more of a problem than it is with Karumba, where you have got the sealed road for a start.

But the concern in relation to live cattle export is: when are we going to get to a stage where we have provided enough breeding stock and the Asian feed lots are so well established that there is no need for them to import our cattle any longer? I hope that that is a long way down the track, but I think we have to realise that there is a risk to the live cattle industry for that reason.

CHAIR—Did someone say that there was not much value adding to live cattle exports as well?

Mr Cleland—I think that value adding to cattle in Australia is becoming a thing of the past, essentially, except for domestic consumption. I could talk probably for another half an hour on the issue of the oligopoly within the Australian meat processing industry.

CHAIR—Some of us would be very interested in that, but it should probably wait for another inquiry. I heard in your presentation your suggestion that we actually could help conservation of species by breeding and returning them to the wild. That is not a very successful way of conserving species; at least that is the evidence that we have heard. Do

you know of anything to the contrary?

Mr Cleland—I could not give you any specific evidence to the contrary. To appreciate that, you have to look at another industry—aquaculture, for example. Ten years ago, people were losing ponds full of fish and crustaceans left, right and centre. That industry has come a long way in 10 years, and I believe the same could happen within the native animal industry.

CHAIR—I think that breeding them and returning them to the wild does have possibilities but, at the moment, the expertise we have and the research that we have done shows that it is not particularly successful. But maybe it will be in the future.

Mr Cleland—There is no financial incentive at the moment, either.

CHAIR—No, there is not.

Mr Cleland—And that is where I think the private sector can have a significant input into conservation in these remote areas of Australia.

CHAIR—I would be interested in further information on seed collection. Obviously, the one that is controversial in this area is foxtail palm seeds.

Mr Cleland—Yes.

CHAIR—I know the Aboriginal people up in that area themselves said that they would like to be able to collect the seed and make an industry out of it. Had you any—

Mr Cleland—I would hazard a guess that there are still quite a few people up there collecting seeds at certain times of the year. In relation to foxtail palms, surely there has to be an argument that if we were to sustainably harvest the seed, in counteracting the seed that was lost from the ground we could germinate and then replace an equivalent number of palms that would have germinated anyhow. We are taking advantage of nature without denigrating it, if you get what I mean. Populations can be maintained, I believe, particularly in relation to flora.

CHAIR—You talked about bush foods and traditional foods. Is there any restaurant in Cairns that is selling bush foods?

Mr Cleland—We have a Red Ochre restaurant in town. I think that you would find that most of the major hotels in Cairns now provide something on their menu which uses some form of bush tucker, from witchetty grubs to bunya nuts.

CHAIR—Mainly meat, or—

Mr Cleland—There are the traditional farm meats, of course. But in relation to flora, I am not quite up to speed on the types of flora that they are using in bush tucker, but there are certainly a wide and varied number of species that they are using. It is a market that is constantly growing. Market research that has been undertaken by the Coen Region Aboriginal Corporation shows that there is a lot of interest from international chains like the Sheraton, and not just in Australia. They are actually using some Australian native bush tucker in their hotels in other parts of the world.

CHAIR—You were going along at a great rate of knots in your presentation, which was useful because we will get all of that information in the *Hansard* and we can go back and read it. Could you spell out what is happening at Coen? My ears pricked up when you mentioned it.

Mr Cleland—Another area—and it is not related to native wildlife—that we are working on is that we have a big problem with fresh food supply in Cape York Peninsula and the Gulf of Carpentaria. The Queensland health department is currently doing a project called the Aboriginal and Torres Strait Islander food supply project. The initial step is that we are hoping to expand the Coen model into a number of other areas so that we have market gardens established for the provision of fresh nutritional produce to Aboriginal communities, which is another issue in itself.

Obviously, if you are establishing a market garden, bush tucker and native medicines are complementary to that type of venture. Coen is probably the most advanced now in relation to the bush tucker side. Hopevale is doing a lot of work in relation to tea-tree. Their plantation is progressing quite well there. They are having serious discussions with the Body Shop at the moment.

CHAIR—What are they seeking to produce—tea-tree oil?

Mr Cleland—Yes—just the raw product for processing further down the track.

CHAIR—What species are they using, do you know?

Mr Cleland—I am not sure.

CHAIR—There is a bit of development on the tablelands in tea-tree oil, too.

Mr Cleland—And it is also worth mentioning that there are huge developments in tea-tree oil in the southern parts of Africa as well.

CHAIR—You said there were some impediments in terms of legislation. Would you like to elaborate?

Mr Cleland—Essentially CITES, the Wildlife Protection Act, the Nature

Conservation Act in Queensland. In order to make this industry proceed, there are going to have to be significant changes to all our legislation and, on top of that, there is the legislation for potential importers of our product. I would certainly like to see a focus on export; it is something that we need. There are endangered species on CITES which we may find lend themselves towards commercial utilisation, but in the future. We will have to convey that information to the international community, particularly where our markets are.

CHAIR—It is always a very difficult balancing act. The registration of crocodiles has certainly enabled them to increase their numbers significantly. You are always doing a balancing act and probably most legislators prefer to err on the side of caution, which you can understand.

Mr Cleland—I can understand that. But we can give the picture to the international community out there that we have the legislation and the controls such that, if you are buying some native product from Australia, you are buying it with the confidence that it is not affecting the existence of that species. It is probably a marketing exercise too.

CHAIR—It is. I am interested in another comment you made. The note I put down here was 'end the illegal trade'. Can you tell us again what you mean?

Mr Cleland—We hope that, by creating an industry, one would have significant controls over that industry. Birds are probably the best example. I do not know any bird smugglers personally but, travelling around Cape York Peninsula, you constantly speak to people who know about this or that person who has been involved in some illegal activity. We would hope that, by commercialising and regulating the industry, the incentive would not be there for those illegal smugglers. By making it a legal industry, we are taking the criminal element out of it. Some of those smugglers might be able to legitimise themselves at the end of the day. Who knows!

CHAIR—Debate has been had in this committee and I think will continue. We have opinions that are as far apart as the planet really on the value of that assertion. It is something that we want to keep on testing.

Mr Cleland—I have never had any one in a position to tell me that the illegal smuggling industry is worth this many dollars or there are this many people involved. But if you travel around the peninsula, at some stage or another, the pub talk gets back to some illegal activity somewhere.

CHAIR—I have travelled around a fair bit of the cape and the gulf, but I probably did not spend enough time in pubs.

Mr Cleland—That is part of the Cape York and gulf experience, Senator.

CHAIR—I used to visit most of the churches, but that is another story. Towards the end, you talked about diversification in rural industry. We would all agree that that is a need. Are the pastoralists on the cape at the moment also following your lead in diversification? Do they see potential?

Mr Cleland—Definitely. All our workshops have had good turn-ups from the pastoral industry, from long-term and short-term pastoralists to indigenous people. The people who see this opportunity are wide and varied. I would, with every confidence, say that the majority of the general community in Cape York Peninsula agree with some commercialisation of native wildlife. The mining industry really benefits the state and the country a lot more than it benefits the people from the region the resources are drawn from. It does not provide significant economic opportunities for indigenous people particularly. Most of the miners fly in and fly out. Indigenous involvement in the mining industry to date has been very minimal.

CHAIR—That is my experience, too; and fly-in, fly-out is really the way the mining industry is going to go in the future.

Mr Cleland—The constraints up there are such that there just are not a plethora of economic opportunities for those people. Unless we try and find small niche markets such as native wildlife, we are going to look at Cape York Peninsula having the highest dependency on welfare in the country for many, many years to come.

CHAIR—That certainly concerns us. This is off the track again, but I will just pick you up on it. Rice: you need a hell of a lot of fresh water for rice, and there is not much of that in the cape.

Mr Cleland—There is ground water. The work that has been done to date has essentially concentrated on soil suitability. DPI did that work, and they have identified 2.2 million hectares of soil as being suitable for horticultural cropping. That is a fair slab of Cape York Peninsula, but we are not advocating that they access that. We are saying that by accessing less than 200,000 hectares of that land, on current market prices you could double the gross regional product of Cape York Peninsula. You could do that with 200,000 hectares, which is a very small part of Cape York Peninsula. It is probably a longer term option. In the short term, outside of tourism and commercialisation of native wildlife there are not too many options staring us in the face.

CHAIR—That is for sure. What about medicines? Is there any professional development or research in that area?

Mr Cleland—No, they are essentially concentrating on the traditional medicines, more or less as a gimmick for the health food market. I am sure that, given resources for research and development, there have to be some fauna and flora out there that possess significant medicinal qualities. I am not an expert on pharmacy or the like, but—

CHAIR—Nor am I.

Mr Cleland—Just given the broad range of fauna and flora species in the area, we have got a Garden of Eden up there which I am sure we can derive some income from, rather than locking it up and praying and hoping that the tourism market is going to grow to such an extent that we are actually going to provide meaningful employment to people up there. I have got my doubts in relation to the long term viability of the tourism industry in Far North Queensland. I think the recent indications are pointing towards that, too.

CHAIR—My perception of tourism in the cape is that most of it is domestic tourism. It is the traditional Australian thing: we have got to take our four-wheel drive up to the tip.

Mr Cleland—Without a doubt. There is a small fly-in market that goes to the Pajinka Wilderness Lodge or the Bloomfield River Lodge, but the infrastructure is not really there to develop a high value international market at this point in time. But you are quite right, through Kuranda they get 60,000 visitors a year and I would say 85 per cent of those have a caravan on the back of their four-wheel drive.

CHAIR—Thank you again, Darren, for your sometimes provocative information.

[11.38 a.m.]

PRATT, Mr Clive Shaun, Member, Queensland Insect Breeders Association, PO Box 618, Cooktown, Queensland 4871

CHAIR—We very much welcome you to the inquiry. We are very interested in what you have got to say, because this is a new area. The whole area of farming native wildlife is new to us, so certainly insect breeding is. We will be very happy to hear your opening statement, and then we will have some questions.

Mr Pratt—The original submission was put in by Jack and Sue Hasenpusch, who are no longer with the association. QIBA was first founded in 1995 and incorporated in 1996 with a threefold aim. Firstly we aim to be a representative body for entomologists; secondly we are here to promote public interest in our native insect fauna; and thirdly, we aim to liaise with other entomological organisations, government departments and other interest groups. At present we have over 40 members, with new memberships occurring regularly. Our membership represents a fair cross-section of the entomological world, being made up of amateur, professional and commercial entomologists.

As state and federal laws stand at the present time, with a few exceptions, no amateur or commercial persons are able to export any of our native insect species unless the specimens themselves have been captive bred by fully licensed captive breeding establishments. At present, a collector has to be at least affiliated with a government body to obtain a collecting permit. It is well known that these permits are just not normally available to the general entomologist.

Our current legislation also has some negative effects. For example, amateur entomologists cannot expand their own private collection by exchanging material with their counterparts overseas without the risk of state or federal prosecution. Nor can we easily undertake any type of field work to expand our knowledge in either state forests or national parks. It is easy to see that current legislation is only stifling private research. At present, Australia is the only country in the world with such strict measures in place.

Excluding some rare species that are currently protected, or that may be protected in the future, we feel there is no justifiable reason why a properly self-managed or licensed system cannot be in place. Such a system would enable an amateur collector as well as commercial collectors to at least exchange small amounts of Australian insects with his or her counterpart overseas without the risk of state or federal prosecution. This system can only help present and future up-and-coming young entomologists to have a better understanding of Australian and world fauna.

If we consider that approximately 95 per cent of all the entomological specimens in the world's museums and probably 70 per cent of all published entomological papers have been provided by amateur entomologists, and that museums and government bodies no

longer have either the time or the funding to undertake more than the very basic research in this field, we find that these institutions rely very heavily on the specimens and information provided by the amateur and commercial field worker.

On the question of commercial export, I am a commercial captive bred specimen supplier, as are several others. I am also importing and exporting large quantities of insects of all types to and from most countries. I supply a large range of material to the amateur collector, international dealer and art worker—that is, for butterfly and insect display gifts. The current legislation only allows for the export of insect specimens that have been captive bred by approved establishments.

This permit system, although working reasonably well, is extremely limiting in the variety of insects that can be utilised. It would be an impossible task, even if we all worked together, to supply even a small variety of our native insect fauna. In addition, the type of material that is often requested by our overseas customers would require immense capital and manpower investment to produce as captive bred material. Even then, most of the material produced would not carry any great monetary value.

It has been shown repeatedly over the last 10 to 15 years that effective wild harvesting and/or ranching systems work extremely well and that, if anything, greatly improve the native habitat from which the specimens have been taken. They most certainly have not had any effect on the wild populations of the species concerned.

Countries such as PNG, Indonesia and associated islands, Peru, Mexico, Costa Rica—to name just a few—all have very effective programs in place. In fact, the Australian government provided the initial funding for the successful set-up of the operation in PNG. These programs all allow for wild harvesting and/or ranching from the wild of native insect fauna on a commercial basis to supply both commercial dealers and private collectors worldwide.

We as a group feel that it is now time for Australia to implement such a program, either as a self-regulating or licensed system, for both private and commercial use. This could do nothing but benefit us and our overseas associates in having a better awareness and understanding of our total environment. It would also help to stop the present black market in our fauna.

CHAIR—This committee is really entering into unknown territory, so we are grateful that you have come here. In your submission there are a lot of scientific names that really do not mean very much to me. What sorts of insects, in layman's language, are we talking about—mostly butterflies?

Mr Pratt—At the moment, the majority of captive bred specimens are butterflies. They are being bred to supply commercial butterfly houses for live displays—such as Kuranda and there are several in South Australia, one in Brisbane, Butterfly House,

Melbourne and so forth. There is also a couple of members that captive breed quite a number of different types of beetles. They are not so much for live displays; they are for direct export for overseas collectors. There is also quite a trade in live pupae that are sent overseas for international butterfly houses, as well as actual dead butterflies for private collectors and commercial dealers overseas.

CHAIR—That is for display mainly?

Mr Pratt—That is for private collectors: people who collect butterflies like people collect stamps or coins.

CHAIR—As you were going along there, you said something about improving habitat. Can you run that by us again and perhaps expand on it?

Mr Pratt—Obviously, it is in the best interests of the people who do undertake a lot of captive breeding at the moment to preserve as much of the habitat as they can. At this stage, this is probably mostly on their own private properties—growing native food plants to feed the caterpillars of the butterflies and other species that they are breeding. It is also very important to them that the original native habitat that the species comes from is looked after.

CHAIR—So it involves replanting some of those species.

Mr Pratt—It involves replanting of some of those areas and also keeping an eye on what may be happening to the detriment of that habitat because, obviously, all the things that are bred by us have to come from a wild habitat originally.

Senator O'BRIEN—In terms of the ranching option of insects from the wild, can you tell us what that means? For example, we have heard, with crocodiles, that there are a couple of options—including taking the eggs, hatching and developing them, so that in fact the only thing that comes from the wild is the egg or perhaps just a hatchling. With butterflies or other insects, what do you mean by ranching?

Mr Pratt—The initial stock is ranched from the wild because it is collected usually as an adult, sometimes as larvae. If an adult butterfly, moth or beetle cannot be found, they are collected as larvae or as eggs and they are hopefully bred up in numbers from there on.

Senator O'BRIEN—So it is the broad range from the adult right down to the eggs.

Mr Pratt—It can be collected at any stage.

Senator O'BRIEN—Is there any optimum? What is the better option?

Mr Pratt—It depends somewhat on the time of year. Usually the best option is the adult itself because an adult butterfly can lay anything from 20 to 100 eggs, whereas to actually find a butterfly egg on a food plant in the wild is quite a job.

Senator O'BRIEN—In your submission, you talked about the owners of a particular property who established a commercial insect breeding facility and that it was in their interest to maintain that property. Does that mean that they were almost able to take insects from the property as if they were breeding them? There seems to be a fine line between—

Mr Pratt—You will have to ask those people. They are actually on after me; they are making a submission later. In their case, they are situated probably on one of the only remaining patches of pristine rainforest in the Innisfail area. The only reason that is there is because of their undertaking. Otherwise, it would probably have been cleared either for housing development or canefarming.

Senator O'BRIEN—You talked about supplying stock to commercial operations such as the butterfly farm.

Mr Pratt—For butterfly display houses such as the butterfly house in Kuranda, yes.

Senator O'BRIEN—Could you give the committee some details of the economies of that trade?

Mr Pratt—Out of perhaps five of our members that are commercial breeders, I would imagine that their turnover in monetary terms could be as much as \$400,000 to \$500,000 a year, depending on what the market is at the time. There is also a lot of overseas trade and I am not aware of what is actually sold in that capacity. But in the internal trade it would have to be approaching that figure, \$400,000 to \$500,000.

Senator O'BRIEN—So there are four to five people combined generating an income from this—

Mr Pratt—Those are members with us, but there are other private persons who breed insects who are not actually members with us at this stage.

Senator O'BRIEN—They are the big five. Are there other commercial breeders that operate at a lower level?

Mr Pratt—No, that would probably be the turnover within Australia for the total amount of people, which would probably be about eight or nine.

Senator O'BRIEN—What about the material that can be supplied overseas now?

What sort of turnover would that generate?

Mr Pratt—I would imagine the turnover there would certainly be well in excess of \$100,000.

Senator O'BRIEN—It is a very small industry now. Can you see it getting any larger if restraints are removed?

Mr Pratt—Yes. The only thing that is stopping it from getting any larger now is the limit of the type of material that we can supply. It has expanded quite a lot over the last four or five years from a very lowly beginning to what it is now. The potential is certainly there. It is also a hobby and there are butterfly houses springing up all over the world now at quite a phenomenal rate, so the future of the industry can be quite substantial.

Senator O'BRIEN—Are there ramifications for the industry here if potential breeding stock is exported overseas?

Mr Pratt—It is up to us whether we supply a particular species or not, so the only breeding stock that goes overseas at the moment as live pupae are butterflies as far as I am aware. The people that produce live beetles obviously do not want those to be bred in another establishment overseas, so they retain them here and sell the dead specimens overseas. The live stock is sent over as butterflies, which have a relatively high turnover in butterfly houses. Most northern European countries have not got either the food plants available—because you need substantial native food plants for them—or the temperature, the average requirements to be able to breed them up in any great numbers.

Senator O'BRIEN—If there were to be some opening up of the overseas market would that in fact be detrimental to future overseas trade?

Mr Pratt—Probably not at this stage. It would probably be too costly for most of our northern counterparts to try and breed the type of thing that we can send over.

Senator O'BRIEN—What about countries in South-East Asia?

Mr Pratt—There are certain countries that do provide live stock, so we are competing with those to a certain extent. The biggest thing is that we have built up a reputation here of being able to supply relatively on demand with little problem. The other advantage is that they are dealing with another group of European people. Although our costs are probably per pupae dearer than they could get a species of the same type of thing from, say, Indonesia, we can supply them on a more consistent basis from here.

Senator O'BRIEN—Is collection from the wild just a random thing done by people with expertise in this area at the moment?

Mr Pratt—Yes.

Senator O'BRIEN—We had a submission from the Far North Queensland Network and Mr Cleland talking about the need, if access to native fauna and flora in the cape region were to be opened up, for there to be some mandated involvement of the indigenous population there. How would that affect your industry's operations?

Mr Pratt—At the moment we cannot collect in a national park whatsoever without a permit that has been issued by either the state national parks or federal agencies. For the majority of our members, and certainly for private individuals, the likelihood of them being granted any sort of permit like that is zero. The only person these days who can obtain any type of permit to collect in a national forest is somebody who has worked for the CSIRO or another institute or else has had a very longstanding reputation in the field and has had permits in the past. But even now, some people who have had permits for state forests for many years have been advised that the likelihood of having them renewed is unlikely.

Senator O'BRIEN—Are there any special educational qualifications or experience qualifications that the insect breeders that you represent might hold?

Mr Pratt—I do not think anybody actually holds a degree or any type of qualifications like that, but you can see from our list of publications that our members are certainly very knowledgeable in the field of entomology. You find that most of the government associations that have entomologists are very specific, dealing in predatory species in crops, fruit flies and this type of thing. When it comes to our general insect fauna, their knowledge is usually pretty poor. They are very specific when they come out of university entomological courses.

CHAIR—Thank you, Mr Pratt. Senator Heffernan will now act as chairman for a while.

ACTING CHAIR (Senator HEFFERNAN)—Thank you. Is there much of an opportunity in the market for insects for research?

Mr Pratt—Yes, there is. I get requests quite frequently from private people from overseas who are doing various research projects, and also from institutions. However, most of the institutions do not bother contacting us because they know there are restrictions on getting anything, and by the time they can get anything—if they can—it is just not worth making the attempt in the first place. It is general knowledge now that if you want to get something out of Australia, you can pretty well forget it.

If they are bringing over a field trip then they can get government approval for that, obviously, but the cost of running a field trip to Australia is very substantial. There are certainly more than enough of us here who can undertake a lot of the field work for

them but, at the moment, we cannot do so. We cannot supply them with any sort of material that they might need for research.

ACTING CHAIR—Could you amplify that a bit more? What are the main drawbacks? Is it the paperwork or the regulations?

Mr Pratt—We can only export specimens that have been captive bred. I had a request only a couple of weeks ago from a researcher in France who is looking for a variety of bulldog ants to do a comparative study with material from Asia. For him to fly to Australia to collect some bull ants and then fly back to where he is doing his research is very costly. I can go out into the wild and collect bull ants and I can have them at home and I can do what I like with them, but I cannot supply them to him for his research. I just cannot do it. There is nothing in place that will allow me to do that, unless I captive breed the specimens. You can imagine the involvement that there would be in getting colonies of bull ants. It is just too costly. The manpower involved in doing something like that means it just cannot happen like that.

Senator O'BRIEN—What would a project like that raise if he was allowed to go and capture a few bull ants?

Mr Pratt—There would not be any great monetary value to supply him with the specimens, it is more a case of the fact that we are helping a fellow researcher overseas. For something like that, I doubt whether any of us would have charged the time involved. We would probably charge the postage, if that, when we supplied him with maybe two or three varieties of things to help his research. It may be 100 ants altogether, in this particular case. If I had been supplying, there would not have been any monetary thing in it for me at all. I would have been simply helping a fellow worker.

Senator O'BRIEN—Are you talking about supplying dead specimens?

Mr Pratt—In this case he wanted live ones.

Senator O'BRIEN—There are a few issues about the transportation of live insects. It would have to be closely controlled, wouldn't it?

Mr Pratt—We certainly transport live pupae all the time. Do you mean the possibility of them escaping into the wild somewhere else?

Senator O'BRIEN—Yes.

Mr Pratt—He has to have a permit to import that type of material into his country. That is still in place. He has to get permission first before they can go over. It is not as though you are saying, 'Yes, I will go and collect such and such for you. I will put it in the mail and you will get it in five days.' There is certainly more involved than that.

At the moment, there is nothing we can help at all.

There are also a lot of private collectors who would like individual specimens of certain species of our fauna. Specialist collectors and some private collectors would like individual specimens of some of our native insects that do not carry a great value, but to try to bring them into a captive breeding situation would be cost prohibitive because you have to go through two or three life cycles to produce two insects, which may be only what is needed at the moment for supply and may not be requested again. There are two definite distinct areas here.

Several of our commercial members have had many, many requests in the past to supply material for research institutions in Europe and the United States for groups of moths—the type of item for which you can run a light in the bush through the wet season and pick out 20 or 30 specimens that might be required for a specific person's work or needs. It does not carry a great deal of work, but it is still another facet of what we can do, especially if you are working in the field anyway for other species for captive breeding. It would also help to stop material going out that should not be going out. Obviously it happens now—material does leave the country.

CHAIR—Is there any development of medicine from insects?

Mr Pratt—Possibly in some cases. There is from some of the wasps and bees. Ants are another thing. We had a request last year or the year before for green ants because there was a distinct possibility that there might have been some chemical compound in the green ants that could be useful and they wanted to do a diagnostic study on them.

CHAIR—And bush tucker?

Mr Pratt—I have not thought about that one. I really do not think that any of us would be supplying anything that would be very tasty.

Senator HEFFERNAN—You do not eat your own butterflies?

Mr Pratt—No, we certainly do not think they would be edible. With beetle pupae, they would not be able to afford to buy the larvae to eat. In that respect, most of the species that we have here would not be big enough.

CHAIR—There is a restaurant in Canberra that serves bogong moths. That covers it, Mr Pratt. Thank you very much for your evidence. It is very helpful.

[12.05 p.m.]

ROBERTS, Mr Christopher Ross, Land and Sea Management Officer, Balkanu Cape York Development Corporation, PO Box 7573, Cairns, Queensland 4870

CHAIR—I am very sorry to hear that our witnesses scheduled next have had a death in the family, so we are replacing Mr and Mrs Hasenpusch with Mr Chris Roberts. Welcome, Chris.

Mr Roberts—Balkanu Cape York Development Corporation is an Aboriginal organisation working in close association with the Cape York Land Council. Essentially, our brief is to provide opportunities for Aboriginal subregional organisations and to help them to obtain funding to undertake various projects.

CHAIR—If you would like to give us an initial statement, we can then ask some questions.

Mr Roberts—Having a scientific background, I would just like to mention a few things in relation to wildlife. It is important to bear in mind that wildlife is wildlife for obvious reasons in different continents and countries. The main reason they still exist is that they are suited to that particular place. It follows that it might be worthwhile looking for opportunities to commercialise these wildlife because they do not need any particular modifications to the existing landscape or water system.

This is particularly important in relation to Aboriginal people because they, of course, have been harvesting this wildlife ever since they have been living in Australia. This seems to be quite a long time—now purportedly around 100,000 years—so they have a fair bit of experience in that area.

In relation to contemporary existence on Cape York, many of the potential commercial opportunities for Aboriginal people have gone elsewhere. Pastoralism has basically been taken on by non-indigenous people. There are presently some indigenous pastoral holdings, but not many. Mining has not fallen into the Aboriginal arena at this point in time. There are not too many options left for those people, except in relation to wildlife.

It would be safe to say that Aboriginal people would support any kind of commercialisation of wildlife, with one very strong proviso. This revolves around the issue of ownership and title. I am not qualified to comment on native title at this point. If there are any questions in relation to that I will redirect you the executives of the Cape York Land Council to handle those.

It is very important that we understand wildlife is a part of the Aboriginal culture. It is not something that is additional to it. People hunt not just for the sake of hunting but

for food, and it is tied in with tradition and culture. Certain rituals are observed and Aboriginal people are very closely tied to their wildlife. They are endemic to their own country.

We have established that there are some opportunities in relation to crocodiles particularly, possibly for emus, and possibly even for echidnas, believe it or not. Echidnas are quite a relished food item on the cape, although housing problems might be difficult in relation to echidnas. They are pretty good at burrowing.

Just getting back to the wildlife of the cape and Australia in general, most of their feet are soft. Most of the animals that have been brought into Australia have had hard hooves and been very hard on the country. We have a very ancient landscape and the country is not really designed for these animals.

Cape York has an additional problem as nutrients are very low in the soil. From my personal experience and conversations I have had with some reputable land managers, including government and private ones, there is a set carrying capacity for a number of things—that includes animals, plants and humans even. We need to be aware of the constraints that the land itself places on commercial opportunity. We need to always bear in mind that any commercial development needs to be sustainable.

There has been quite a bit of concern in relation to Aboriginal hunting, which has run parallel with this commercialisation of wildlife debate. There have been statements regarding the use of technology in hunting. The Aboriginal view is that technology has very little to do with the activity of hunting. The activity itself is the part that is important. It is not how things are got that is important in many cases, although there are some marked exceptions where there are gender protocols in Aboriginal society—men are allowed to get certain things and women other things.

Basically, many people who are concerned about technology in Aboriginal hunting are asking Aboriginal people to do the equivalent of asking a farmer to revert back to a horse and plough scenario for cultivating land. What the Aboriginal people would like to remind managers of is that technology might be a way of more efficient harvesting, but it is that efficiency that requires management rather than the harvesting itself. Improved technology means a better handle on management rather than removing the ability of people to maintain their rights to their wildlife resources.

I should add that Balkanu Cape York Land Council represents the area from approximately 16 degrees south latitude all the way to the top, including some of the northern islands, which are actually Aboriginal islands as opposed to Torres Strait Islander islands. These areas are still fairly untouched in the Western sense. Aboriginal people, of course, do not recognise the concept of wilderness because they have been interacting with those landscapes for a long time.

These are still in a good situation to provide genetic resources for commercial wildlife use. We heard this morning about problems with fertility using generations that have been contained in grow-out situations and breeding situations. It will be necessary for commercial utilisation to access brood stock to maintain genetic diversity.

While I am on that subject, I think it is also important that the inquiry take into account the potential of Australia to actually export beneficial genes in live produce overseas. Perhaps a case in point might be the red claw crayfish, which comes from the western side of Cape York. It is a very good aquaculture species and is presently being farmed in Ecuador and even Germany, in artificial conditions. We are actually putting our trump cards overseas for other people to use, so we should bear that in mind when exporting wildlife from Australia.

Aboriginal people, of course, are bound by their traditional clan estate boundaries and these do not necessarily follow any hard boundaries that have been established to date in leases or whatever. It is very important for anyone wishing to conduct business with Aboriginal people to bear that in mind. There are certain people who speak for certain country and not for other country, and it is important that those people speak directly to those traditional owners.

It is part of the job of Balkanu to provide that interface for commercial development. Aboriginal people are all for commercial development as long as the protocols that they require are followed. Once again, we offer any entrepreneurs or people with ideas to speak with Balkanu and we can introduce you to the people involved. They may choose to use us as an intermediary or deal with the commercial proposition themselves.

On plants and seeds, we have a little bit to say about that. I might just add that much of the endemic flora has been removed from Cape York, which effectively puts that outside the control of Aboriginal people. To make that very plain, plants and seeds have been taken away and are now grown in outside nurseries, which removes the commercial edge for Aboriginal people. So opportunities are narrowing even more.

With regard to feral animals, many people consider these just to be a nuisance. Aboriginal people have got some very interesting views on feral animals. Apparently, pigs substitute around about \$300,000 worth of meat protein for Aboriginal people. To some extent it takes the heat off turtle eggs and turtles themselves, which are species recognised in the conservation arena.

Some Aboriginal communities take offence at people hunting their pigs because this is their tucker that runs around in the bush. They have been associated with pigs ever since pigs arrived a couple of centuries ago. Therefore, it is not hard to see that they see feral animals as part of their environment and a resource that they can use. Once again, in relation to commercialisation of hunting, that will basically be determined by each

community group and they should handle those things themselves.

Birds are an important component of Cape York wildlife and there are some possibilities there. The palm cockatoo, particularly, is one that is often mentioned in spurious reports about smuggling and so forth. Once again, there is no real evidence of that occurring but the stories are rife. These birds are bred overseas quite successfully and fetch handsome prices, so opportunities exist there. But the tourism potential and birding on Cape York itself is quite good because the number of endemic species there is quite high and birders are quite keen to zero in on special geographic areas to get a look at certain birds. Once again, commercial industries can come from the existence of endemics themselves rather than actually harvesting.

In relation to bush medicine, this is extremely problematic, particularly in regard to intellectual property. That is another debate again, but it centres on the question of what Aboriginal traditional information is worth. If someone identifies that a fruit or a plant or an animal is good for such and such and allows research targeting of a particular spectrum of chemicals to address those health problems, we need to have some way of recognising the contribution of this process that Aboriginal people have gone through to actually discover these things, and it is a very difficult problem.

In relation to research, we would just like to draw the inquiry's attention to the fact that Balkanu has developed a statement of principles in regard to biophysical research on Cape York which we would like to introduce to any interested parties intending to do research. It sets out how to get to know the right people; how they can be incorporated; capacity building on the ground, and getting more involvement of the communities themselves. That document is available from Balkanu at any time, from myself.

That is all I wanted to say. The most important thing is to bear in mind that people are affiliated with country and they are interested in what happens on their country. So if people want to come there to look for a certain thing or to look at the prospects for commercialisation of such and such, it is very important that those people are connected with the people who represent that country or sea, and we can provide that service for those people.

ACTING CHAIR—Did you say you have an academic background?

Mr Roberts—I am a marine biologist by trade and I have spent 3½ years at the top end of Cape York showing tourists around the top end for Pajinka Wilderness Lodge.

ACTING CHAIR—Where are you based now?

Mr Roberts—In Cairns.

Senator O'BRIEN—Mr Roberts, I think you were here when Mr Cleland gave

evidence on behalf of the Far North Queensland Network. Have you got any comments to make on that evidence? He was talking about the opportunities for Aboriginal communities, in particular, arising out of the commercial utilisation of native wildlife.

Mr Roberts—A lot of those things were true. I supported his view that Aboriginal involvement should be as strong as possible because the economic options are very few indeed for Aboriginal people. However, I would like to say that the priorities of Aboriginal communities should be designed by themselves rather than by those purporting to manage their country.

Another project we are undertaking at Balkanu is one in conjunction with LWRRDC, the Land and Water Resource Research and Development Corporation, that is now working in combination with CSIRO, whom we all know. They came to see us in relation to research opportunities for Aboriginal people. What has been happening in the past is that well-meaning people have gone up to the cape and said, 'We would like to do this kind of project on your country,' and Aboriginal people have generally said, 'Yes, that is fine. Go ahead.' People have done the project, left a report and off they have gone.

We are trying to reverse the system a bit by having a consultancy done on research priorities and having a person in particular—this is actually Viv Sinnamon from Kowanyama natural resources management office—go to each community and ask community leaders what they think should be done in their community. What we are hoping to find is there will be some indication of what the priorities are for Aboriginal people. Quite often you will find that the priorities are not strictly commercial in the first instance. There are a whole lot of other things to sort out prior to looking at management and commercial opportunities.

Senator O'BRIEN—Are there any plans to go into some sort of bird breeding program?

Mr Roberts—None at all on the cape at this point. I think it is a very specialised area and I believe that the start of commercialisation of wildlife on the cape will need to be in a joint venture situation with people who have experience and the capital to support such a thing. Aboriginal people can provide the genetic resources for many areas and can also make the running in relation to regulation in some instances a lot easier, although they would impose their own restrictions on what could and could not be done on their land.

Senator O'BRIEN—You talked about opportunities in terms of native animal wildlife; you mentioned echidnas. I think that is the first time that I have heard the proposition that echidnas could be used. Firstly, is that a traditional food source?

Mr Roberts—Yes, it is in many places.

Senator O'BRIEN—Is that something that the community has given real consideration to?

Mr Roberts—No, not at this point. It is just an interesting scenario and might be tied in with some kind of a tourist venture in the first instance. But in many cases the commercial utilisation of wildlife needs to cross a psychological barrier, I believe, in particular in relation to the Western concept of what is edible and what is not edible and what should be eaten and what should not be eaten and what should be protected and what should not be protected.

That goes to kangaroo and is one prime example. It is actually quite a fine quality meat, if you have ever had the opportunity to taste it. But the thought of consuming kangaroo is not very pleasant for a lot of people.

Senator O'BRIEN—Do any of the communities that you are associated with supply feral pig to crocodile farms?

Mr Roberts—The only one that I know of is the area around Edward River. The other crocodile farms are too remote to be of much use.

Senator O'BRIEN—Is that an income generator in communities that you are associated with?

Mr Roberts—Only in the Edward River community.

Senator O'BRIEN—That is one particular community. You talked about feral pig being used as a food source equivalent to \$300,000 of meat. I suppose we are a little off the inquiry in some respects in that regard, but I am interested to know if they were, as well as using it as meat, generating an income from that product.

Mr Roberts—No. As far as I know, it is just eaten locally. There have been some efforts to install freezer units in various places, but they have not worked for a number of reasons.

Senator O'BRIEN—Going back to the question of echidnas, is there any evidence of the size of the echidna population on Cape York?

Mr Roberts—There is no evidence at all that I am aware of. Until such time as the echidnas become hard to find, I guess there might not be.

ACTING CHAIR (Senator Heffernan)—What is your view of the best opportunity for the area you represent in terms of ecotourism versus commercial harvesting of animals?

Mr Roberts—I think there is room for both. As I said, the mind-set of people going to the cape needs to be a little bit more pragmatic than possibly it is at the moment. There is a very strong conservation thought pattern regarding Cape York at present. I believe that is well founded. This also might be restricted to certain areas—the high rainfall, the high country areas like rainforests are very diverse. In the rainforests, the plants are really very important in relation to conservation. But in other areas, there are larger expanses of fairly homogeneous country, and perhaps there is room there to investigate the possibilities of using some country for some things and other country for other things.

Most importantly in Aboriginal management, it is important to conserve the cultural overlay—the stories of Aboriginal people, and the actual physical representation of those stories is vitally important to Aboriginal people. Those are the things that need to be maintained as a priority before we start dealing with conservation and commercial use.

ACTING CHAIR—Do you have evidence of smuggling of native species?

Mr Roberts—No, just hearsay, that is all.

ACTING CHAIR—No hard evidence?

Mr Roberts—No direct evidence.

ACTING CHAIR—There was a suggestion at our hearing in Brisbane that the eating of native species was inappropriate even for our indigenous people, except where it was taken by traditional methods. I take it you would not agree with that?

Mr Roberts—Absolutely, I do not agree with that statement at all.

ACTING CHAIR—Thank you very much. Do you have a dialogue with, for instance, the Far North Queensland network?

Mr Roberts—With the land council?

ACTING CHAIR—No, with David Cleland—the people he represents?

Mr Roberts—Yes, we do.

ACTING CHAIR—What about the Queensland Conservation Council?

Mr Roberts—Yes, we do, indirectly through CAFNEC. One of the most important developments in the cape at this point is the Cape York heads of agreement in relation to land use, which is effectively pastoralists, conservationists and Aboriginal people coming together and talking about arrangements in relation to land use.

ACTING CHAIR—I suspect that the Queensland Conservation Council and yourselves have a lot of talking to do because they have a very different view of life to most witnesses that we have heard. But there is nothing like having dialogue. The thing that intrigues me is that there is not a lot of dialogue between people with a different view. They tend to stand outside the door and yell at each other and not try and get down and sort the thing out.

Mr Roberts—I do not know. Our relationship with CAFNEC, which is the strongest conservation organisation in the Cape York area, is cordial. We talk to each other on a regular basis. We understand that there are certain priorities that both Aboriginal and conservation organisations need to push. We tend to agree to disagree on some issues.

ACTING CHAIR—I just cannot remember which organisation that was—Queensland Preservation, or whatever. It astounded me, I have to say.

Mr Roberts—I refer to what I said earlier that the indigenous existence is a combination of human and wildlife surroundings. It is not humans in isolation from the wildlife. The whole concept of biodiversity has problems for Aboriginal people in so far as the people have been separated from the environment they live in. Aboriginal people are an integral part. They have lived with the wildlife, they have words describing certain things that sound like the animals. The application of the biodiversity principle to Aboriginal people needs to be taken in the context of the people having been with that environment for a long time themselves.

ACTING CHAIR—So how long have you been in the job?

Mr Roberts—I have been with Balkanu for two years now.

ACTING CHAIR—Can you point to some things that have excited you in achievement—areas you can pursue and see a result?

Mr Roberts—To mention the land use agreement again, I think that is a very important breakthrough. We have also been establishing ourselves in decision making platforms in relation to management in quite a few places. The reason that Balkanu was set up was to take, effectively, the non-core business from the Cape York Land Council, the health council, the youth council and regional ATSIC. The land council is focused on land and tenure and, of course, during that process, they had quite a deal of problems addressing management issues. So my role in Balkanu is to take on some of the sea and land management stuff. Of course, the Department of the Environment, in relation to national parks et cetera, has an important part to play in the work I do, as well as the Great Barrier Reef Marine Park Authority, in rezoning the far northern section.

For me, in the last two years, there has been an exponential growth in management

involvement. Aboriginal people have had a voice in management in trying to get this cultural priority up into the debate and instead of talking about animals over here and people over here trying to put those things together.

ACTING CHAIR—Generally, would your view be that our indigenous people would support the proposition of the commercialisation of wildlife?

Mr Roberts—Yes, I believe they would.

ACTING CHAIR—We are very grateful for the opportunity to fit you in, as it were. My congratulations on the work you are doing. Thank you for your time, and your comments and points will be of great interest to us. As I say, I think the support of our indigenous people to the aspirations of the commercialisation of wildlife will be very important.

Mr Roberts—Thank you all very much for providing the opportunity.

Luncheon adjournment

[1.35 p.m.]

THIRIET, Ms Dominique, Secretary, Australian and New Zealand Federation of Animal Societies, PO Box 1023, Collingwood, Victoria

ACTING CHAIR—I welcome Ms Dominique Thiriet on behalf of the Australian and New Zealand Federation of Animal Societies. I thank you for finding the time to appear before the committee. Can you give us a short introductory statement.

Ms Thiriet—I am the secretary of the Australian and New Zealand Federation of Animal Societies, which is an umbrella organisation for animal welfare organisations in Australia and New Zealand. There are about 38 organisations altogether. ANZFAS welcomes this inquiry. As an animal welfare organisation, our main objection to the commercial utilisation of wildlife is that we feel animals should not be valued commercially but for their intrinsic worth. We are concerned that the industry has already started and, in some cases, is already fairly well established. Some very major considerations of animal welfare and conservation cause us concern. We feel that this inquiry will be an opportunity to examine critically all those issues and, hopefully, put an end to the industry and commercialisation generally. If that is not possible, we would like to see at least an end to all the cruel practices and the practices that are not environmentally sustainable.

ACTING CHAIR—Thank you very much. Do you disagree with the view put this morning by our indigenous people that they support the commercialisation of native wildlife?

Ms Thiriet—As an animal welfare organisation, we feel that it is irrelevant who is utilising the fauna or wildlife. For us, what is of concern is the cruel practices. It is really irrelevant who is doing it.

ACTING CHAIR—So do you think you are better qualified to make that judgment than the indigenous people?

Ms Thiriet—Our feeling is that, irrespective of whatever practices are being implemented, if they are cruel we will be opposed to them. Indigenous people might not feel that they are cruel, but it is an issue that, as an animal welfare organisation, we have quite a bit of experience with.

ACTING CHAIR—Do you have an objection to the taking and eating of native wildlife?

Ms Thiriet—Yes.

ACTING CHAIR—By our indigenous people?

Ms Thiriet—Yes. It would be contradictory to the principles of animal welfare and animal rights generally, which, as I said earlier, put an intrinsic value on wildlife rather than a commercial value.

ACTING CHAIR—Where do you stand on the commercialisation of ostriches that are native to another country but not here?

Ms Thiriet—The same. There is no difference between native and exotic animals in terms of cruelty. If the practices are cruel, we are opposed to them. In terms of animal rights, we feel that animals should not be used.

ACTING CHAIR—Do you eat meat?

Ms Thiriet—No.

Senator O'BRIEN—It seems that there is a community standard that the eating of meat is acceptable. A number of domesticated animals have been used traditionally for some time. I take it that your organisation has a problem, firstly, with any cruelty involved in the husbanding of those animals. Secondly, as a matter of principle, it is against the eating of animals. As I said, the community seems to not agree with the second principle. However, it is probably fair to say that the majority of the community would agree with the first principle. Is there a reason we should apply standards to native wildlife that are different from those applying to exotic species that have been imported?

Ms Thiriet—As I said before, the principle of equal consideration applies to both native and non-native animals, so in this sense we do not see any difference. There are, however, extra concerns in terms of native wildlife. There is the potential for additional cruelty. For example, native wildlife are probably more likely to suffer from stress because they have not been domesticated. There is very little known about their needs. Any industry that is going to be rearing animals, especially if it is an intensive practice, is more likely to ignore the needs of those animals.

Another problem is specific to native wildlife. If the industry is seen to be commercially unviable, for example, there might be a greater incentive for farmers to release the animals in the wild because they will see that they are wild. There is the potential for animals to be completely unsuited to being back in the wild. For example, if we release emus that have been kept in captivity, their toes might have been cut off and they will be completely unable to run and have a normal lifestyle again.

Senator O'BRIEN—Have you got any scientific evidence that the clipping of toes of emus has the effect of disabling the emus and preventing them from running?

Ms Thiriet—I do not think that you need scientific evidence. If you clip three toes of a bird which uses its toes to walk around, there is going to be some significant

problems. We are not talking about clipping the nail; we are talking about clipping through the last part of the three main toes of the bird, which is a fairly significant injury. This is done so that the animals do not scratch each other if there is a fight. Scratching is a fairly significant part of their behaviour in the wild. If they do not have their toes to defend themselves, obviously there are going to be some problems.

Senator O'BRIEN—I suggest that if there were a code that prevented the release into the wild of animals that had their toes clipped, would that in some way meet your concerns?

Ms Thiriet—I guess that it would alleviate the problem of animals being released in the wild. The question is whether the code would be enforceable. That is a problem we always have with codes.

Senator O'BRIEN—Part of the debate over those sorts of practices is the same debate that you would have with other domesticated animals and cruelty to them in captivity. For example, it would be cruel to release cows or sheep into an environment where they could not survive when they had been disabled in some way. I am really assuming from your comments that we should not deal with these animals any differently. There should be a code which prescribes that there should be no cruelty in the husbanding of those animals. Specifically, they should not be released into environments where they cannot cope.

Going away from domestication for the purposes of human consumption, what is your organisation's view about the taking of native birds from the wild for the purposes of breeding? I might preface that by saying that we have spoken with some aviculturists in the last couple of days. They tell us that the life expectancy of native birds bred and kept in captivity is approximately double that of native birds in the wild. Has your organisation got a policy about that matter?

Ms Thiriet—Yes. First, I would like to argue that that life expectancy is probably not the case for all birds. Some birds are extremely susceptible to stress in captivity. I think a lot of them would have a life expectancy that would be much shorter than in the wild. I do not have any specific examples for birds. For example, it is pretty well known that dolphins in captivity live only a few years as opposed to in the wild, where they live 20 years.

Senator O'BRIEN—These people who have been breeding them say it is their personal experience, having bred the birds, that they do not suffer the stress that a bird taken from the wild would suffer. Being born into captivity and being used to dealing with humans, they are not stressed. Your proposition, in terms of their argument, seems to apply to birds taken from the wild for the purposes of initial breeding. It seems not to occur later. It appears that your organisation has not really considered that.

Ms Thiriet—I agree that birds bred in captivity probably suffer less stress than wild birds. But we are still talking about birds kept in captivity that live in cages and which are denied all their behavioural needs. They are completely unable to fly. Their food is boring and they live in isolation. Most of the caged birds are parrots and finches, which are actually very social birds: they live in big groups. In captivity, they will be living in pairs or are often isolated. So the conditions of living in captivity, even though the stress might be less than if they had been taken from the wild, will still be unacceptable.

Senator O'BRIEN—In your submission, you talk about crocodile exploitation. From the evidence we have, the crocodile population in the wild is growing. The commercialisation of that species has had, if not no effect, possibly a positive effect in terms of enlarging the species. Do you allege that there is some cruelty in the way that the crocodile is kept and killed?

Ms Thiriet—Very much so. One of the main problems of keeping crocodiles in captivity is that they are kept in really crowded conditions. Crocodiles are very territorial animals. When they grow to a certain size, they really need their own territory. In crocodile farms, they will be kept together and they will have no way of running away from each other. There is also a problem with the food. Most of them are being fed pelleted food, which does not provide variety. Perhaps from a nutritional point of view, it is fine, but—

Senator O'BRIEN—The evidence we have is that they are fed waste product from food processing plants, such as chicken parts, kangaroo parts and feral pigs rather than pelleted food. Have you had a look at some of these operations yourself?

Ms Thiriet—At the moment, an enormous amount of research is done by certain agencies, such as the Department of Primary Industries, into the development of pelleted food with a view to making it cheaper and more convenient. They are also looking at the possibility of feeding the crocodiles only every second or third day because that will save labour costs. At the moment, the crocodiles are perhaps still fed what you would call a reasonable diet. However, if crocodile farming is going to expand and is to be done on a more intensive basis, it is likely that it will move in exactly the same way as domestic animal industries have, where cattle are fed pelleted food and all sorts of waste products.

Senator O'BRIEN—Perhaps you would like to look at the *Hansard* from this morning, where we received some evidence about the frequency of feeding and the type of feed, and give us your response. There seems to be a discrepancy between your view of what happens and the industry's view of what happens.

Ms Thiriet—Yes. We would be happy to do that.

Senator HEFFERNAN—Have you been to a crocodile farm?

Ms Thiriet—Not personally, no. I certainly have done quite a bit of research in—

Senator HEFFERNAN—Do you think it would be a benefit to your knowledge to go and have a look?

Ms Thiriet—Certainly.

Senator O'BRIEN—In terms of the question of possum harvesting, you make some reference to the brush-tailed possum and the operation in Tasmania for shooting and trapping of possums for the overseas meat and fur market. Can you tell us the source of your knowledge for your submission?

Ms Thiriet—In 1994-95, a Tasmanian based industry started looking at the possibility of exporting possums to South-East Asia for the crispy skin market, I think they call it, where the animals are actually being slaughtered in Australia but exported with their skins. As a result of that commercial push, they developed a code of practice. I think that was in association with the Department of Environment and Heritage in Tasmania.

The code is, as far as we are concerned, completely unacceptable in terms of what practices are allowed. For example, one of the things is that possums would be able to be trapped and kept in cages for up to 48 hours before slaughter. Anyone who has seen a wild possum would not have any doubts that keeping any possum in a small cage for 48 hours would be an extremely cruel practice—that is without food or water.

Senator O'BRIEN—Have you seen that activity? Have you seen that happen? Have you seen a possum in a cage for 24 hours?

Ms Thiriet—I am a wildlife carer and I have got quite a bit of experience with stressed possums. I can tell you that, even with the most caring person, any animal that is kept in a cage for 48 hours becomes absolutely crazy—and that is if you keep it in a quiet, dark room. If you have got a commercial industry which is trying to catch thousands of possums every night and they are all transported in the back of a truck together, I would assume that that would be—

Senator O'BRIEN—I accept that you would make assumptions. I was just asking whether there was any direct evidence that you had of that. And, yes, I have seen a possum in a cage. In fact, I am a senator for Tasmania, so I know some of the background. But I was interested to know where your information was coming from. Are you aware that the possum is an introduced species in New Zealand and there has been marketing of possum meat from New Zealand? As you are an Australian-New Zealand organisation, do you have any material that your organisation has received from New Zealand about that practice?

Ms Thiriet—The introduction of possums into New Zealand is a concern to ANZFAS, certainly. One of the concerns is the fact that it is being exploited as a resource in New Zealand now. As soon as an animal is being exploited, there is absolutely no hope of getting rid of it as a pest because there will obviously be a demand for it.

Senator O'BRIEN—I thought one of the purposes of the exploitation in New Zealand was to try to eradicate it because it is an introduced species and a pest.

Ms Thiriet—No-one in the commercial industry would want to exploit their resource to the point that they would completely run out. There would always be an incentive to keep some there to breed, so that next year they can come back and have another harvest.

Senator O'BRIEN—That is possibly true. In the case of Tasmania, I understand the program to be designed to combine the commercialisation with a cull of the number of possums because of the damage they do to bushland.

Ms Thiriet—There is no doubt that possums can cause difficulties in Tasmania. There is absolutely no doubt about that. The problem we have is that culling is not the most effective technique. It has been shown that fertility control is now the way of getting rid of the animals effectively, by preventing them from breeding rather than culling them at the end.

Senator O'BRIEN—Have you got some material that you could give the committee about that practice, dealing with the process and the cost of that process, so that we can assess that against—

Ms Thiriet—Of fertility control?

Senator O'BRIEN—Yes.

Ms Thiriet—Yes, there was a fertility control conference last year, which was an international conference. An enormous number of papers came out of that and we would be happy to provide some information.

Senator O'BRIEN—Okay. In relation to mutton-bird harvesting, I understand that the harvesting of mutton-bird was a traditional Aboriginal activity. To a great extent, the method of harvesting has not changed, although the people who do it may have. Can you tell us what your concerns about that are and also whether your concerns would remain if the original indigenous population was continuing the harvesting?

Ms Thiriet—Again, I have not seen mutton-bird harvesting, but I have read quite a bit about it. The practice is generally to go into the burrows, get the little chicks, grab them by the neck, swing them around, break their necks and then utilise them in whatever

way. I understand that they used to be exported in fairly large numbers in the past, but not any more. The demand really has gone down. We cannot see any justification whatsoever to do that to birds.

Senator O'BRIEN—Was there ever a justification?

Ms Thiriet—No.

CHAIR—I have a couple of quick questions. In terms of reintroducing birds to the wild, your submission suggests that has a limited benefit and we have had other evidence from that point of view. We have also had evidence that this has been successfully done with birds such as cockatoos. Are you aware of that? Can you fill out for us your concerns in that area?

Ms Thiriet—Yes. I think we need to draw a distinction between the rehabilitation of cockatoos and species that are fairly common as opposed to endangered species. Cockatoos can be rehabilitated fairly successfully and I do not have any doubt that this is actually a really good thing to do rather than keeping the birds in captivity for the rest of their lives.

The difference with endangered species is that very often the birds have become endangered because their habitats have been destroyed. If you rehabilitate them back into the wild, they will go back into a destroyed habitat where they might not have any chance of survival.

CHAIR—That was what I was trying to get at. In terms of legal controls on animal industries, which you say are fairly thin, have you any other comment that would help the committee? Are there gaps in the codes of practice? Do you have any information that you can give the committee that would help us because that is certainly one of our concerns?

Ms Thiriet—Codes of practice have been a real problem for us. The majority of the codes of practice that we have dealt with were codes for domestic animals. As far as I know, there is only a very small number of codes for native wildlife in commercial situations. There is one for emus, one has been drafted for possums, and there also is a draft crocodile code. I think there might be a code for keeping wildlife as native pets in Victoria.

The codes of practice for domestic animals are extremely deficient in the sense that they are very minimal standards. There is nothing that would really benefit the animals. Most of the codes would actually say that they are designed for the benefit of the animals, whereas they actually allow animals to be kept in conditions which are completely contradictory to all the anti-cruelty provisions.

The main problem that we see with codes of practice in Australia is that they are not enforceable. You can have a wonderful code on paper—which is actually not the case here—but, if it is not enforceable, it is just not worth the paper it is written on.

A breach of a code of practice would not even attract a penalty under cruelty legislation because it would need to be proved that the breach was actually an act of cruelty, which really never happens because the process is just so long that it would not be possible. They are deficient to start with and they are not enforceable so they really do not have much value at all. In some states, they are not even legally regarded as an entity—for instance, in the Northern Territory, Western Australia and even New South Wales, which is supposed to be one of the most progressive states in terms of animal welfare. So those codes are actually not for animal welfare.

My feeling is that, if the commercial exploitation of wildlife was increased and codes of practice were developed for those animal industries, even if they were looking at issues of management and environmental factors as well as animal welfare factors, again those codes would have absolutely no value at all unless they were made enforceable.

CHAIR—You believe there is significant underfunding of our export control agencies. I presume you mean AQIS?

Ms Thiriet—I mean AQIS, Customs, the Wildlife Protection Authority and Environment Australia. The number of staff in those areas is so low that people just do not have any opportunity to control effectively the export of wildlife. I know that from experience because I used to work in the Wildlife Protection Authority. We were chronically understaffed and we had very few resources. For example, we used to receive applications for commercial exploitation of wildlife. The only thing that we could do was take the word of the person who was putting in the application because we had no staff to actually go in the field and check out the practices. I do not think it is acceptable to do it that way.

For example, Customs have lots of things to do and I do not think that wildlife is their priority. They are probably looking at drugs and quarantine issues much more than they would look at wildlife. In terms of wildlife, you need to be trained fairly significantly to identify wildlife species, particularly if they have been skinned and Customs officers do not have that training. It does not matter how much goodwill they have to enforce the legislation, they are just not trained to do it.

Senator HEFFERNAN—Given all that you have said, where do you think the balance lies between feeding the world and the choice people would have to eat meat or vegetables? There is intensive farming of vegetables and I am sure you have probably eaten vegetables without your knowledge that have had chemicals on them which have killed worms, grubs and all sorts of insects. Where is the balance?

Ms Thiriet—I personally do not think that there is any justification for eating meat. I have not eaten meat for 14 years and I think I am a fairly healthy individual. I do not think there is any justification for this. Unless the demand for meat decreases—and in fact it is shown to be decreasing, which is good news for me—there is no way that animals can be provided to consumers in the scale that is needed unless it is done intensively. There is no commercial viability in very small industries and there needs to be some intensive farming. Intensive farming is automatically cruel because the animals cannot be looked after individually.

Senator HEFFERNAN—What about the vegetables and the chemicals?

Ms Thiriet—If people ate less meat they would not need to feed lots of vegies and crops to animals and therefore those vegetables could be used for humans. Because the demand would be low, there probably would not be quite the same need for fertilisers and all sorts of nasty chemicals.

CHAIR—Thank you. It is very good to get a variety of evidence.

[2.04 p.m.]

MARSHALL, Ms Nadine Anne, Endemica, PO Box 240, Townsville, Queensland 4810

MARSHALL, Mr Paul Augustine, Endemica, PO Box 240, Townsville, Queensland 4810

CHAIR—If you have an opening statement, we would be very pleased to hear it and then we can have some dialogue by way of questions.

Ms Marshall—Thank you for inviting us to come here today. Endemica is a furniture business that we are developing at the moment using kangaroo leather as a means of promoting conservation.

Mr Marshall—I share partnership in this business venture.

CHAIR—Do you have an opening statement you want to make?

Ms Marshall—We need to refer to our submission generally.

CHAIR—Do not read your submission, because we can do that. Any comments you make would be very helpful.

Ms Marshall—I have just a general comment. We are running this business because the greatest concern to us is the environment of Australia and land degradation. We believe that kangaroo harvesting offers a realistic solution. It does not necessarily need to be all bad.

Mr Marshall—I make the point that both of us have a background in environmental science and we have seen first hand and indirectly the huge problems that Australia's environment faces now and into the future. There seem to be a lot of solutions bandied about and there is a lot of expertise. But really what it takes is for the broader community to appreciate that there are alternatives which are viable. We consider that a business along these lines would be one way of getting that message across to the broader community.

Senator O'BRIEN—Where do you get your kangaroo leather from? Are you now operating the business or is it just at the planning stage?

Ms Marshall—We are still in the research and development stage. We have developed prototypes. There are several tanners in Australia that do a very good job, but we have found one in Sydney that we think is fantastic. He gives us excellent quality kangaroo leather.

Senator O'BRIEN—Is there sufficient supply of kangaroo leather to supply your need?

Ms Marshall—At the moment, yes. We are obviously just starting and it is very small. There is a very big supply. Last year three to four million kangaroos apparently were culled and the leather we are getting at the moment is from that wasted resource. What we would like to especially advocate today is that we go further than the culling; that we do not regard kangaroos as a pest so much, but actually value them as a real resource, ultimately with the bigger picture in mind.

Senator O'BRIEN—Are you suggesting that they should actually be—and other submissions have used the term—ranched, that is, taken from the wild and kept for the purposes of subsequent slaughter and use of their products, skin and meat?

Ms Marshall—Yes, in the same way that we do with cattle and sheep. Whether they are free ranged or whether they are farmed as such is a matter for the community on a wider scale to decide. We personally think free ranging is very feasible. There are experts within Australia who are able to answer that better than we are.

Senator O'BRIEN—I personally would leave the economics of that to someone who is prepared to commit the capital to ranching or farming them.

Ms Marshall—I guess our job is to provide a market.

Senator O'BRIEN—What is the relative value of kangaroo hide to the equivalent quality bovine leather?

Ms Marshall—At the moment it is more expensive, but we believe that it is very, very beautiful. It is very strong compared to cow leather. The CSIRO are doing their own research at the moment to quantify how much stronger it is than cow leather. Kangaroo leather is very thin, but very strong in comparison to bovine leather. Initially it will be a luxury market as far as we are concerned. Hopefully, the price will still make it affordable. In fact, we do not have big factories and all the rest, so I imagine it is at the moment competitive price wise.

Senator O'BRIEN—In terms of the processing of the leather into furniture items, do I take it that the town address you have on your submission is the location that it would be processed at?

Ms Marshall—No. We are subcontracting all of our work. We get the skins from Sydney and we have carpenters and upholsterers in Townsville who are doing the manufacturing for us. We are basically quality control designers and marketers.

Senator O'BRIEN—Could you give us some sort of idea of what you expect

would be generated in terms of value adding to the raw materials from the enterprise that you are hoping to get off the ground?

Ms Marshall—It is a bit difficult at this stage. Initially we will concentrate on the Australian market. I imagine that will happen for the next couple of years at least and hopefully we can look overseas to the Asian markets.

Mr Marshall—Maybe the answer is that we have not done a detailed economic or financial analysis of the whole process. One of our incentives is to incorporate as much as possible of the process within Australia and keep it here. It will be significant value adding, but we could not quantify that for you at this stage.

Senator O'BRIEN—What market research have you done as to the acceptability of the product? I would like to know if you have, for example, ascertained what degree of resistance there is to using the leather from our national symbol on furniture.

Ms Marshall—It is something that worries us, but we believe that with good promotion Australians will feel more comfortable with the idea that they are buying a kangaroo leather couch as opposed to a cow leather couch for reasons such as the sustainable future of Australia. As far as market research goes, it is difficult to understand what Australians do believe. A survey came out recently saying that 50 per cent of Australians have at some stage eaten kangaroo meat and that 75 per cent were willing to do so if the opportunity arose, which we found quite encouraging.

Senator O'BRIEN—Can you refer us to that survey? That may be useful.

Ms Marshall—Actually I thought it was you that contracted it. It was in the Brisbane *Courier-Mail*. It must have appeared last Tuesday.

CHAIR—We could probably track it down through the parliamentary library. I am very interested in the way you have come at this—which is different to most of our other witnesses—from an academic background and stream. Where did you do your study?

Ms Marshall—Both of us did our undergraduate and honours degrees in zoology at Melbourne University. I subsequently went on and did a masters degree at Monash University in the salinisation of fresh water streams.

Mr Marshall—After my undergraduate degree, I worked as an environmental consultant for three years in Melbourne and now I am in Townsville doing a PhD in the environmental effects of human activities. So it is a subject that is pretty close to our hearts.

CHAIR—At James Cook?

Mr Marshall—Yes, at James Cook.

CHAIR—You mentioned Professor Grigg. We were certainly going to take some more evidence from him and have a submission. You are fairly convinced by his research by the sound of it?

Ms Marshall—Yes. We have not met him but his papers are certainly clear, logical and they make sense. His personal opinion comes through. He is very concerned about the environmental state of Australia and its future and how sustainable our current land practices are. To us, it is frightening. We think this is a good start anyway. It may well offer a good start to a solution.

CHAIR—Certainly, having done some of our landcare work, and some of the other work this committee has done in terms of mulga lands and marginal grazing lands, we would want to look at it. I have to say to you that his opinion is not universally accepted either. I suppose that is true of most of what this committee is doing on this inquiry. There is a wide diversity of opinion.

Mr Marshall—Can I make a comment on that?

CHAIR—Yes.

Mr Marshall—I would be interested, firstly, in your feedback on what you have heard so far. But it seems to me that a lot of the opposition to this whole idea falls into two camps: either that we cannot manage it properly, which I think is just a matter of political will; and the other is that there is a very strong animal rights concern about it. Would that be the scope of the objections?

CHAIR—I think so, yes.

Mr Marshall—I have been dealing with environmental issues a lot as a scientist and dealing with conservationists. It really seems that often there is not enough distinction made between animal rights concerns and environmental ethic concerns. It really seems to me that that distinction needs to be made quite clearly because animal rights are very important. But they often are a shorter term concern and I think that they need to be considered in the longer term concern of environmental degradation. Animal rights are really important, but they become less important long term if we do not have an environment which supports those animals. That is the stance we take and we feel quite strongly about that.

CHAIR—The other issue which I do not know that this committee can resolve but which we are certainly going to be confronted with is whether or not one should eat meat of any kind. That is clearly one of the underlying issues. It is a bit outside the terms of reference but it cannot be avoided. However, thank you, I hope you did not mind me

pressing you on your background because it is interesting.

Professor Moll from the University of Queensland gave us evidence on Monday about his experiences in Africa. He said that once farmers were given ownership of the animals on their properties that that changed their attitude significantly to the way they cared for and valued their land. Again, that is a controversial view, but I do not know if you have any thoughts on it.

Ms Marshall—Unfortunately, I would say it is human nature. If there is money there, you will protect it. If sheep were removed they would have to be replaced by an economic equivalent and, hopefully, we can show that kangaroos are sustainably better than sheep. So there are two incentives for farmers, they will look after the native habitat and we will protect our biodiversity and all the secondary consequences that come from that.

CHAIR—Another part of the debate that affects what you are saying is that in the evidence we were given, one of the problems is overstocking, whether that is of European animals, such as cattle and sheep, or even of kangaroos themselves. There are those pressures. You might like to comment on that.

Another problem is that most farmers, even in the marginal mulga lands, would see the harvesting of kangaroos as being an add-on rather than a replacement. I do not know whether you see any resolution of that. You are really saying you would like to see the replacement of sheep and cattle by kangaroos.

Senator HEFFERNAN—Could I add to that question? Is there a point, in terms of marginality, where hard hooved animals are acceptable in country where you grow lucerne and successfully grow pasture?

Ms Marshall—That really is for the wider community to address rather than Paul and me. Personally, we have to think why we are going to market kangaroos. Is it going to be for another commercial interest or is it going to be for other purposes as well? If it is to promote conservation as such then we need to make sure that lies within the definition of how we do it.

As for overstocking of kangaroos, you will need to talk to a kangaroo biologist, but I believe that they are very efficient breeding machines. When the season is good they will breed very well and when it is not very good they will not breed so much. Knowing that, you can manage accordingly. Farmers, because it is such a new venture, will go to a lot of trouble to learn as much as possible about the animal and make sure that they get the most out of their land and out of their animals.

Mr Marshall—I am not a farmer and I have not dealt a lot directly with farmers, but I get the feeling that a lot of overstocking results from the inflexibility of the stock to

respond to fluctuations in the Australian environment. The stock is not native to this region. I believe that the numbers of kangaroos, because they are much better adapted to the environment, will fluctuate naturally with the environment and that therefore artificial overstocking is less likely to occur.

This is a new industry and it is a chance to do it right. To us it is very important that the whole objective of establishing the use of kangaroos—from our interest, but I guess wildlife generally in your interest—is done in an environmentally sustainable way, and that includes the big picture. That is really where we stand. If there is enough will it can be done, and that is really what it comes down to for us.

CHAIR—One of the major issues for this committee is looking at national standards and so on. Are you aware of any inadequacies in state regulation or national regulation you would like to see addressed in general terms?

Mr Marshall—I guess we really have not looked at that at all.

CHAIR—That is all right. Do not worry.

Mr Marshall—We are relying on you guys.

CHAIR—That is our job, but it is helpful to canvass it as widely as we can. Your submission says that government must implement measures to conserve natural habitat at the national level. Can you give any examples of what such measures should be? Have you any experience with the landcare movement, for instance?

Ms Marshall—Yes, I guess it is the sheep grazing areas generally that are being eroded at a rate that is no longer sustainable. More specifically than that, I do not think so.

Mr Marshall—We have seen many examples where it is taken initially to the national level to actually implement conservation measures because various states have various attitudes towards this. It really seems that effective conservation on a national scale requires a national initiative. I guess that is why we suggest that that level is important. In terms of actual measures, without any specifics, the sort of thing we are thinking of is incentives for farmers to retain land in association with replacing some of their traditional stock with kangaroos—these sorts of incentives that incorporate longer term environmental goals.

CHAIR—Are you familiar with the landcare movement?

Ms Marshall—In Victoria, but not so much in Queensland.

CHAIR—That is an inquiry that is running parallel with this one that this

committee is doing as well, so they do overlap. We are aware that there are some landcare projects that are very, very good and some that have got real question marks against them. But that is one national initiative that flows down to the ground level, which is really the only place where it is really effective. It has a lot of Commonwealth funding.

Senator HEFFERNAN—That is not a kangaroo skin you have on, is it?

Ms Marshall—No.

CHAIR—Thank you very much for appearing today.

[2.23 p.m.]

WALKER, Mr Raymond McAlpine, Managing Director, Nature's Gemhouse Pty Ltd, 335 Sheridan Street, North Cairns, Queensland

CHAIR—Welcome. Do you have anything to add to the capacity in which you are appearing?

Mr Walker—I am the managing director of Nature's Gemhouse Pty Ltd and Argo Traders. Our company specialises in the acquisition of coral seashells, amongst other products and the retail and wholesale sale thereof. Basically, my major concern is that over the past 15 years we have been very dissatisfied by actions of the bureaucracy to put systems in place with respect to the nuts and bolts workings of our industry.

CHAIR—Just before you go on, have you got a supplementary submission?

Mr Walker—Yes.

CHAIR—Is it the wish of the committee that that be received and published? There being no objection, that will be done. We would be happy now for you to address us and then we will put questions to you.

Mr Walker—Basically, with the second submission I sat down in front of a word processor to work out what I was going to say to you guys. It then ended up being such a lengthy document that I decided I might as well submit it, and let you guys read it and ask me questions about it. In addition to that, I have brought a couple of practical examples along which I feel demonstrate how inadequately the people that you employ to conduct research into areas where you intend to legislate conduct their work.

Senator O'BRIEN—I have a question in regard to the range of this inquiry and this aquatic branch of the inquiry. Are there any questions about this?

CHAIR—This is on the limit of the inquiry, but we did agree to include it. To explain this to you, Mr Walker, we had problems putting a framework around this inquiry. We could have given ourselves a job until the year 2050, so we tried to put up a framework. We decided that we should go as far as your concerns, so we have included those. Can you give us a bit of background to the environmental aspects of harvesting gemstones and shells et cetera?

Mr Walker—Molluscs and corals exist in abundance in the world's oceans. They are harvested to a very limited degree in comparison with other food industries globally. They have similar impacts and considerations as those involved in marine harvesting.

CHAIR—We are laymen in this area. Can you just describe for us how you

harvest?

Mr Walker—With respect to seashells, internationally there exists a small business in selling specimen grade seashells to collectors at a high price. It is probably by far the smallest industry in the world based on molluscs. Seashells are collected by a variety of techniques. They include intertidal walking and collecting at low tide; collection by divers; collection by dredging; and as a commercial by-product of fishing effort—trawlers in particular.

Coral is basically wild harvested. Pieces that are ornamentally attractive are removed by chipping hammers from the reef and this has been a managed industry in Queensland since about the early 1950s. Annual production is estimated at about 50 tonnes out of annual regrowth and attrition of 50 million tonnes.

CHAIR—What kind of regulation framework do you work within?

Mr Walker—There is a good framework in the state of Queensland in this industry. The state government issues commercial licences. I am not quite sure how many there are. There is a limited number of licences which basically define a physical area of reef where the collection of a four-tonne annual bagging of coral is allowed. As this is in the Great Barrier Reef Marine Park, there is similar licensing required within the park.

Our problem is not with the collecting legislation. The problem is with the fact that, internationally, corals are listed as CITES endangered because of overcollecting practices in the Philippines. Australia has not come on-stream with respect to issuing permits for visitors to take the purchases out of the country, whereas a lot of other countries in the world have. This is causing us financial grief. We are paying money for licences and we cannot sell our product. As you can see from the photos, we are into the mariculture of corals—the growing of corals in a subaqueous farmed environment. Again, we cannot export them because we cannot get a piece of paper from the federal government to say that we are allowed to.

CHAIR—We will need to come back to that. Can you describe to us what happens? This is, again, something which we know nothing about.

Mr Walker—As far as the public is concerned, there are duplicate copies of that submission available with photocopies of that photograph. Basically, this is our first attempt at mariculture. We put in a 100-piece coral plot last year to see how it stood up to a cyclone. It was partially trashed by cyclone Justin, and we now know what to do about it. Basically, we are driving a piece of polythene pipe, which is like a fishing rod holder, into the bottom and then getting a piece of wild collected coral from our wild collector licences—

CHAIR—That is alive, of course?

Mr Walker—Live. We place it in the top, strap it into place with an electrical tie and let it grow in the wild. Work at Cook University suggests that in two or three years we should be able to grow and value-add something like \$10 a piece on a piece of coral. So out of 100 square metres of ground at that density, we should be able to make a gross of \$400,000 a crop.

CHAIR—I presume that it is too early to say whether or not it is reproducing?

Mr Walker—No, it is not. It is six months old. It is not reproducing as such; it is growing. Corals reproduce by releasing larval plankton, which subsequently settle. The product is obviously larger. It has grown over the pipes. It has covered the electrical ties and is off and running.

CHAIR—So you have pretty fair hopes for its survival?

Mr Walker—I have no doubt at all that it is viable. It is a very good thing to culture, because it is very easy to keep live; it is very easy to keep predators away from it.

CHAIR—You said that there was federal government regulation. Does that prevent you from exporting the product?

Mr Walker—Yes, it does.

CHAIR—Absolutely?

Mr Walker—Absolutely.

CHAIR—So people who come here and buy coral products cannot take them out of the country?

Mr Walker—Basically, until about a year ago, it was going out and Customs was turning a blind eye to it. About six months ago, they started enforcing it. They are selectively enforcing it. If it is a large ornamental piece of coral, they confiscate it from the tourists at the airport. If it is a small piece of coral or it is incorporated into a souvenir, they let it go. If you pack it into your suitcase, it probably goes through. If you take it in your hand luggage, it gets confiscated. We are perfectly entitled to sell it legally in the street, but we get a hell of a lot of unhappy tourists when they get to the airport.

CHAIR—So the only ones who can hang on to it are people within Australia at this stage?

Mr Walker—Correct. If those same people go to Indonesia or New Caledonia, they are perfectly entitled to take it away, because those governments have gone through the necessary actions to issue international CITES permits.

CHAIR—Does any of your product come from fishery by-catch?

Mr Walker—Coral does not, but seashells do. The by-product catch of trawlers is a significant political issue in Queensland. When the legislation was prepared 20 years ago, there was no provision for by-catch, so all of the by-catch off trawlers in Northern Queensland is illegal. That includes Moreton Bay bugs, scallops and everything like that. The fisheries department is not enforcing that because it is ridiculous. They are trying to amend the legislation in Queensland so that they are entitled to keep squid, fish and other things as a result of the by-product. It is logical that trawl fisherman should be allowed to keep and sell the seashells they catch as a by-product of their trawling.

CHAIRMAN—Is your problem with the state legislation?

Mr Walker—We have problems in the area of mollusc collection with state legislation. I can demonstrate that fairly clearly with a couple of samples I have brought along. We have problems in the export of both Australian seashells and molluscs. In the case of coral, which are CITES listed as endangered, there is a lack of action by the federal government. In the case of seashells, action by the federal government makes the industry unviable. In other words, we are required to seek a CITES permit for species not listed as endangered to export seashells. For example, if a Russian tourist comes into our shop and buys one of those shells for \$1, we then have to apply for a permit then post it to him or her. The same applies to every seashell in Australia.

Contrary to the results of a project conducted under federal government guidelines to assess endangered molluscs, they came back as endangered. It is absolutely beyond my comprehension why they are. If you read Dr Barry Wilson's book, they are absolutely abundant along 5,000 miles of our coastline over a 200- or 300-mile width and about 10 guys collect 500 a year. It is physically incomprehensible that they could be in danger.

The point is that someone comes into our shop and buys one of those perfectly legally, goes to the airport and he has committed an offence, punishable by a \$100,000 fine, by smuggling an Australian seashell. In some cases, you partially enforce it.

Ten years ago, the Australian Federal Police prosecuted a couple of Greek gentlemen who came here and spent \$30,000 or \$40,000 on non-endangered Australian molluscs. They were in a position to obtain one of these permits from Canberra. They decided they did not have time to wait in Australia and took off. They were perfectly entitled to buy. Their only crime was that they failed to fill out a form. They were apprehended, lost their \$40,000 worth of stock, and were fined \$5,000.

I personally put the guy up in a house and paid his fine, even though he only did about \$2,000 worth of business with me. I resented the action as being grossly unfair. I lent the guy some shells to start in business in Greece again and he is a good friend. It was reported in the media as 'Federal Police crack shell smuggling racket.' The only thing

that these guys did was not fill out one of your forms and apply for a permit.

CHAIR—I imagine that this is making inroads in terms of your economic liability.

Mr Walker—Very substantially. When this legislation came out in 1984, we were turning over \$200,000 to \$250,000 in seashells a year as a small mail order business from home. This year I will turn over \$30,000. The reason for that is that we do not buy stock; we put no effort into marketing because the industry exists on six-monthly interim acts of parliament for it to continue. We do not know that we are going to be in business in four weeks time. You cannot buy in and hold stock. How the hell can you conduct business when, with each and every transaction, you have to apply to Canberra?

CHAIR—In terms of whether or not species are endangered, I presume plenty of scientific research backs up—

Mr Walker—The Commonwealth commissioned a study which is detailed in my second submission. The results of that study were ludicrous. Basically, it has perplexed me why. In that document, I have given an effort to explain why. I basically believe you go to the wrong people. You have gone to—

CHAIR—What is that?

Mr Walker—The additional submission.

CHAIR—We have not had time to read that yet.

Mr Walker—To give you an idea, this is a seashell hanger made in the Philippine islands. That shell there is *Strombus Luhuanus*. The Malacological Society of Australia advised you that shell was threatened by collection. My commercial bag limit in Australia is 10 of them per year. They are absolutely abundant all over the reef. The current export price in Cebu in the Philippines, which has basically the same population density as the Great Barrier Reef, is around \$US500 per tonne. If you would like me to deliver 500 tonnes of them to your office in Canberra in four months, I will do it. It is ridiculous.

Similarly, *Pyrene Versicolor* I am allowed to collect that many a year as a commercial operator in Queensland. I am allowed 10 a year and an amateur is allowed three a month. This shell is about \$400 a tonne in the Philippines. I feel unhappy.

CHAIR—We are picking that up, Mr Walker. This committee, by the way, has not done any legislating in any of this area, but obviously—

Mr Walker—Sorry.

CHAIR—No, that is all right. This is the opportunity. That is why we are having the inquiry.

Mr Walker—What I really resent, as a taxpayer and Australian citizen, is that if the people that are engaged to do this research and put law are so incompetent and waste your resources so much that they cannot resolve these issues, how the hell are we going with real issues, like feral species that are thundering all over the place? How competent are we in those areas?

CHAIR—I do not know the answer to that.

Senator O'BRIEN—In relation to the coral farming—is that how you would describe it?

Mr Walker—Yes.

Senator O'BRIEN—Is that performed by permit?

Mr Walker—Yes, it is under permit from the state and the parks department.

Senator O'BRIEN—Do you have to lease ocean floor for it?

Mr Walker—There is a small application fee, but we hold three wild collecting licences with four-tonne bag limits. We are collecting the coral from within our existing permits.

Senator O'BRIEN—Is it described as aquaculture by the government?

Mr Walker—I think it is. Mariculture is probably a better term than aquaculture.

Senator O'BRIEN—Do you have any expectations about the future for this industry? Is it conditional on being able to export?

Mr Walker—It is very conditional on being able to export. To give you an idea of its potential, if I were allowed to sell the 12 tonnes I collect a year—and the bulk of my customers are international tourists, basically Japanese and Chinese and Europeans turning up in town—I could retail it at about \$20 a kilo, which would make it worth a quarter of a million dollars a year. That is retail through a few shops. I see the potential for a very substantial international market for a variety of purposes. It has very fast growth rates. It is potentially, down the track, an industry worth millions of dollars.

Senator O'BRIEN—What are the ecological issues that arise from this form of cultivation?

Mr Walker—Very few. Initially you have to wild harvest spat to get it up and running, but it is then self-generating. The only concern you may have is that you are changing an environment as much as any farming does. You will select sandy areas away

from reefs, such as those you can see on that photo. You are creating more coral on the Great Barrier Reef than there used to be. You can create very substantial production from small areas. If you look at the size of the Great Barrier Reef, the extra area that will be covered by coral rather than sand is infinitesimal.

Senator O'BRIEN—Would this form of cultivation have any positive impact in terms of the pressure on the reef and the coral on the reef?

Mr Walker—Yes. When it is up and running, there would be little need for wild harvesting. Wild harvesting presents no problem anyway logically for hundreds of years because the Barrier Reef is so vast and corals grow and the industry is managed. Some corals have growth rates of six to nine inches a year. If you grow your coral intensively in local areas, it does take pressure off wild coral. If you have an area which has been depleted of coral through intensive tourist activity or sewerage run-off, you have a source of non-wild coral to subcontract and regenerate.

Senator O'BRIEN—Is it not the case that the reef is being degraded by the products of human occupation in some coastal areas?

Mr Walker—It is most certainly. One logical way to compensate for that is to farm coral and then replace it. It is very easy to relocate coral successfully. Part of the way coral reefs grow is that they are smashed apart by cyclones. Pieces that fall on the ground die when deprived of light. They then start growing away from that point as new pieces of coral when they receive sunlight.

CHAIR—I am trying to get my head around this issue because it is fairly new to me. In terms of the CITES convention, which is an international convention to which most nations are obligated, are you saying that the Philippines do not have the same regime in terms of obedience to the CITES convention? Are they outside it? Why does it affect us so much?

Mr Walker—I cannot specifically answer as to why the Philippines has not come on stream with CITES permits with respect to coral. It may well be that their government simply has not attached priority to it, or perhaps their permits will not be accepted internationally.

The Australian government, when it enacted CITES legislation back in 1982, was very enthusiastic about it, and some of the things they put in place turned out, with the advantage of hindsight, to be impractical. They have said that they will not accept the CITES permit of any country unless the government of that country demonstrates to the Australian government that their management program is adequate. For example, say I was to buy a shipment of *strombus gigas*, which is farmed in the Caribbean. I have just been to Cuba and I am looking at exporting seashells out of Cuba. Say I got a shipment of seashells from the Cuban government and got a CITES permit. By virtue of its legislation, the Australian government would have a problem accepting that, because of the non-

interaction between the two governments on this issue; and given the practicalities, that is never going to happen.

CHAIR—That is obviously something we need to pursue some more, but it is very helpful to get it on the record. We do not have any more questions, so we thank you very much for your evidence. We are coming to visit you, so we will get a chance to add some hands-on experience to your evidence.

Mr Walker—You are most welcome.

[2.48 p.m.]

PERGOLOTTI, Ms Deborah, Frogs Coordinator, Cape York Herpetological Society, PO Box 848M, Manunda, Queensland 4870

CHAIR—We have an additional submission from Ms Pergolotti, and the committee agrees that this document be received and published. If you would like to give us an opening statement first and we will then go to questions.

Ms Pergolotti—I would like to thank you, Senator Woodley, for initiating this inquiry. It is well overdue that we had a very hard look at what is happening with wildlife in this country. I guess nobody would doubt that. I appreciate the senators coming to Cairns to hear what some of us have to say.

The additional material I have given you is more voluminous than the previous submission, which was strictly on the domestic side of things. I want to point out a few bits from this one so that you have got an idea of the content in a nutshell. The additional material concentrates on the international side of things. Even though I am here to represent a reptile keepers group today, I have 12 years avicultural background in the United States and Australia, so the examples in this submission draw very heavily on the avicultural side of things. I was involved in the United States campaign in the mid-1980s which tried to persuade Australia to open up the export of pest cockatoos under a carefully controlled management program, and I was also involved in the lobby against the New York bird law, which was the start of the demise of the bird trade in the United States.

There are a couple of bits I want to point out specifically. The first thing is on page 4. The reason I have come here to speak to the Senate today despite these written submissions is that we are very concerned, not just with the environmental impacts of a legalised trade in wildlife from this country, if there were to be one, but with the impact of not using wildlife in a legalised and controlled fashion.

Because of human nature, prohibition never works. Since 1960 Australia has prohibited the export of its wildlife with very few, strictly monitored exceptions. Australia also prohibited the import of wildlife up until 1989, when it began to allow a very few excessively bureaucratic and expensive shipments of birds to come in. I have given examples later in the submission of what the process has been for that importation program.

I realise that importation is not something that the committee is dealing with, but I have included importation examples here because it is the non-commercial mentality of the Australian government that has led to the problem with wildlife leaving this country illegally, and also with wildlife coming in. If that mentality is to be changed for the export side of things, it must be changed for the import side as well.

In another section further down we say that there has been a lot of hearsay about smuggling and the media has been eager to publicise whatever information becomes available, but eyewitness accounts are extremely rare. It cannot be denied that something is happening though. I provided a list which is taken from TRAFFIC bulletins in the UK and US and other materials in Australia. The list gives about two full pages worth of successful convictions for smuggling of material in and out of Australia.

CHAIR—How many?

Ms Pergolotti—Two pages worth, and this is not a full list, this is a sample. Animal mortality and disease potential is another problem of not having a legalised trade. While animal rights groups have lamented long and loud about the trade, the fact remains that smuggled animals have it far worse. When animals are posted in the mail or stuffed into suitcases, or drugged to keep them quiet, what kind of animal welfare is that? Again, while import is outside the inquiry's scope, it is important that a change in attitude about control of commercial utilisation be applied.

We have already seen devastating outbreaks against commercial plants here in Australia with things such as the papaya fruit fly. Is it not possible that the costly campaign to eradicate the papaya fruit fly could have been caused by fruit transported into Australia with an illegal shipment of birds which were being fed on the fruit? How do we know?

Additionally, smuggled birds are notorious for being disease-ridden when they arrive overseas because of the excessive stress caused by the shipping methods used to keep the cargo unknown, that is if it arrives at all. They pose a risk to other countries' wildlife, and even to the people that come into contact with them. There is an example in this submission about some customs officers in Belgium, seven of whom contracted chlamydia when they intercepted a shipment of illegal birds.

Criminal behaviour, of course, is another problem that is well publicised in the media. Prohibition means that the only way to obtain a desired product, regardless of what it is, is to get it on an illegal black market. Such markets are run by criminals who will do anything not to be caught. A good reason why some of these people might be interested in such an activity is the amount they can get for a species. I like to use, as an example, the Hyacinth Macaw from Brazil. I have been told by those who seem to know about such things in Australia that a Hyacinth Macaw would fetch about \$A100,000 per bird. That is an overwhelming incentive which astute criminals would have tremendous difficulty passing up. With this particular species a mere shipment of 10 birds is worth \$1 million, and that is a hell of a lot of money to try to walk away from.

There are various examples here. We are concerned as to whether or not the government here has done everything it can to combat the tragedy of illegal trafficking of wildlife, and there are seven examples here which point out situations that deserve

examination. We have provided a few recommendations as to what might be done. They are not carved in stone recommendations, they are simply some working ideas that could be examined.

At the end of the submission I have included several different articles out of newspapers which may be of interest to the inquiry, as well as a letter from Alexander Downer having to do with his party's position—if they ever did get into power, which now they are—having to do with illegalised trade. Mr Downer said:

However, when the choice is between killing birds and exporting them, we decided that in the interests of humanity it was preferable to export them!

Some statistics are included from the US bird import program which indicate the realistic picture of the mortality rate of shipments. That is what I would like to point out from the submission.

CHAIR—We will read your supplementary submission with great interest.

Senator O'BRIEN—The committee had the opportunity to visit some aviculturists who were breeding Australian birds and imported birds. Is there something special about the Hyacinth Macaw that you quote as having a value of \$100,000? We saw macaws that were purchased for somewhere in the vicinity of \$30,000—an immature potential breeding pair.

Ms Pergolotti—There are quite a few different species of macaws. The availability of stock in the country determines how high the price goes. The Hyacinth Macaw, in particular, was upgraded to CITES appendix 1 several years ago. I think it would have been six to eight years ago when it was upgraded. The Hyacinth Macaw is the world's largest parrot. It is entirely cobalt blue except for a yellow periophthalmic ring and a yellow bit along the mandible. It is a very, very large bird and it commands an experienced person to handle one. I have had one on my shoulder and I will not do that any more.

In Brazil in the mid-1980s, Charles Munn had done studies of the bird in the wild and at that time there were estimated to be only 2,500 in the wild. Since then the numbers have climbed a little bit to about 3,500. There are thousands of them in the United States and most of the time they are kept as single pet animals. Before the species went to appendix 1 it was on appendix 2 and at that time the US price for that bird was \$7,000 each. Within a few days of CITES upgrading the species to a prohibited trade status, the price went from \$7,000 to \$14,000 and the last I heard it was \$US20,000.

It is just a particularly spectacular bird and because it has been prohibited from trade for a long time, the value goes up. I have been told that they do indeed exist in Australia but there would only be a very small numbers of them. It is the sheer

spectacular appearance of this bird that has led to that value.

Senator O'BRIEN—The aviculturists say to us that it is preferable to open up the export trade in certain species of native birds, but that it is not desirable to take birds from the wild and sell them—rather it is desirable to breed and only sell domestically bred birds. What is your view about that?

Ms Pergolotti—There are actually two categories of species there. The only birds that should be taken out of the wild are those that have been previously deemed pest species such as galahs, sulphur-crested cockatoos—those sorts of birds. It should be done in a particular manner, not just in a willy-nilly, haphazard, trap any time of the year you want manner.

The problem is that even if Australia did now change its mind and decide that it would export wild caught pest species of birds, the United States will no longer accept them. They have now changed their own legislation and they will not allow wild caught birds to be imported into the USA. So Australia, basically, has missed the boat in that regard, although if the Australian government made a special petition to the USA authorities on the grounds of combating smuggling then the USA authorities would be hard-pressed to turn them down.

Aside from the four pest species of birds, aviculturists in this country have been breeding birds for a very long time and there are massive stocks of them. I actually have with me today a print-out from the New South Wales Parks and Wildlife Service of all the birds that are actually kept by licensed aviculturists. For example, there are 14,000 Major Mitchell cockatoos in captivity in New South Wales and that is not including the ones that are being held without registration under the 19-bird rule.

So there are plenty of captive raised birds available in some species which I have noticed in the literature as being listed as hard to breed, such as red-tailed black cockies. I have been to the houses of people who have very successfully bred them with absolutely no difficulty, so the captive raised stock is available.

As far as people wanting to set up galahs or sulphur-crested cockatoos for captive breeding, if it were for trade I suppose people would find that incentive enough to do so, but at this point very few people keep galahs. In fact, I keep galahs. When I first arrived here I joined up with a couple of aviculture groups and there was a sort of a joke in the group, 'She keeps galahs!' They are definitely considered in a derogatory manner by aviculturists here.

Senator O'BRIEN—What they suggest is that wild caught birds are more likely to harm themselves in transportation and that they will not be as docile as domestically bred birds. If we are to open up the wild caught trade to the United States, ignoring the question of whether the government in the United States would want to accept them, they

suggest the consumer would not want them because they would be a difficult species to keep, their life expectancy may well be lower, they would be stressed.

Ms Pergolotti—The way the bird trade was set up in the States previously meant that you could walk into any bird shop and have a choice. There might be an Indonesian Moluccan cockatoo sitting there that has been captive raised. On the next table, there might be another one sitting there that has been wild caught. The consumer could walk over to one of those birds and decide that they liked the captive one better. The captive one might be \$1,800 whereas the imported one could be \$600 or \$900. So the consumers had a choice as to which bird they wanted. Many consumers bought the imported ones and spent the time to tame them or set them up for breeding if that is what they were buying a bird for. In the heyday of the bird import program in the US in the 1980s, the import of birds was about 700,000 or 800,000 a year. Most of those were wild caught and they certainly were sold.

The main concern with Australian birds going to the United States is the price. First of all, the system should be cost recovery. The price down the line should fall somewhere below what smugglers currently charge for them. It should be somewhere in line with the price of captive raised stock. You do not want the birds to be on the market too cheaply. At the same time, you do not want them to be too expensive so there has to be a middle line. I am sure there would be a lot of rigmarole involved in a legalised trade. There would be a lot of expenses to pass down the line to the consumer anyway.

Obviously, people are buying birds which leave Australia now and enter the States. They are buying them now whether they are wild caught or not—they want them that badly. So I think the consumer would still be buying the birds if they were available, regardless of whether they were wild caught or not. It would be preferable, if wild caught birds are going to be used, that they are trapped when they are juveniles.

CHAIR—Obviously, some of the evidence we are getting is totally contradictory. That is typical of our inquiries.

Ms Pergolotti—The entire issue is extremely contentious.

CHAIR—It is useful to have the two opinions and to test them. In your submission, you suggest that people who kept wildlife as pets would be more responsible than cat or dog owners currently are. Certainly, when people argue from the other perspective, they usually use the example of the treatment of cats and dogs as an example of how people would treat wildlife. Can you substantiate or spell out for us why you say—

Ms Pergolotti—What I actually did say in the submission—as I recall—is that, in Australia at least, it is preferable for people to be keeping native animals as pets rather than keeping cats and dogs, simply because cats and dogs are part of the environmental

problem that is now rampant in this country, particularly feral cats.

CHAIR—So it is more from the environmental aspect?

Ms Pergolotti—Yes. In the whole aspect of care, we have learned a lot more about how to care for things than was known 10 or 20 years ago. Through all the community groups that are around—and that is partially why the group that I am here representing today exists—that information is available that teaches people how to admire and appreciate these things. If people do want them in captivity, we teach them how to keep them properly. So there is information available. But in the same way, a lot of people do not take proper care of their children or they do not take proper care of their car. You cannot put a leash on everybody and say, ‘You will do this’. But you try your best to educate people.

CHAIR—In terms of overseas markets, what we have looked at mostly are birds. That has been what we have taken most evidence on. I presume that there are people in Asia, for instance, who would be happy to keep Australian frogs, snakes and lizards et cetera. Do you know what the market is like in those other species?

Ms Pergolotti—In Asia I do not know anything about their market. All I know is that Japan is one of the largest bird interest countries, second to the United States, and I think even Europe is less than Japan. There are certain sorts of animals that I think the CYHS would not want to see involved in trade, such as amphibians for example. Certain species of reptiles might be fine and certainly people in the US have done very well with our species. They seem to do better at breeding them than our own people do here. As far as the European and the Asian markets go, I would not know much about them.

CHAIR—You have a licence for keeping frogs?

Ms Pergolotti—The way the state legislation is, for the amount of frog material that I have I do not need a licence. It is a strange sort of set-up in Queensland. In some ways it is ridiculous, because as an unlicensed person I can go out to any creek or pond I want and collect an absolutely unlimited number of tadpoles. As soon as I get a licence to keep them, I am not allowed to collect anything. So why does anybody want to get a licence? There are a lot of anomalies in the legislation that we are certainly concerned about.

CHAIR—That is an anomaly that is worth putting on the record.

Ms Pergolotti—Our society—that is, CYHS—is actually involved in some meetings with the environment department here at the moment to talk about the proposed changes in regulations that they are planning and we are trying to get somewhere with it.

CHAIR—I notice overseas you have kept geckos and other animals.

Ms Pergolotti—Yes, my apartment was quite full, mostly with parrots. Four of them were cockatoos and all Indonesian species. I had some Argentinian birds, African Poicephalus—a smattering of things. They were all pets; none of them were bred. With a lot of Americans it seems that way; they do not have just one bird. Once they have a bird, then it turns into five or 10 because they enjoy them so much.

CHAIR—I want to put a couple of opinions side by side and just get you to comment on them, if you would. You support the keeping of wildlife as pets. We have heard that. We received a submission from ANZFAS, the Australian and New Zealand Federation of Animal Societies. They gave evidence and included some evidence from the RSPCA of poor conditions being permitted and gave examples of gliders being caged or animals having suffered as pets. The quote from the RSPCA lists reptiles, tortoises, echidnas, possums, wombats and bats as all having been mistreated. Do you have any comment on that?

Ms Pergolotti—As far as I know in Queensland and New South Wales, nobody is supposed to be keeping bats except those who have a wildlife rehabilitator's licence. Nobody is supposed to be keeping gliders, or in fact mammals of any kind, except in New South Wales where they have now allowed two species of the hopping mice but otherwise no mammals at all except by licensed rehabilitators. Recently here in Queensland we had a conviction of a fellow who kept reptiles. The conditions in his collection were supposed to be absolutely appalling. These people do not do anything to help our situation at all.

Most of the members of CYHS, for example, are just small collectors who have a couple of animals and, as far as we can tell, there are no problems with the way those animals are being treated. We encourage people to take care of things properly. Again I would question how old that information is, because some of the stuff that I have seen from the animal rights groups is from material that was published 15 years ago. The same information is still being touted when things have changed since then. In fact, I have described some of that in here, having to do with mortality statistics.

CHAIR—Thank you for that. There being no further questions, we will read your supplementary submission with great interest. It is very interesting to have opinions put side by side as we have had today. We will sift through the weight that is to be given to the different submissions.

Ms Pergolotti—Thank you for holding this hearing and I do not envy you your work. You have taken on a very large task.

CHAIR—We do have thousands of pages of submissions.

Ms Pergolotti—Yes, and if there are any other questions that you have after today's hearings, then by all means contact us.

[3.29 p.m.]

ZINGELMANN, Mr William Jack, Walsh River Road, Watsonville, Queensland

CHAIR—Welcome to our inquiry. Could you state in what capacity you are appearing before the committee today?

Mr Zingelmann—As a private citizen.

CHAIR—We are happy to take an opening statement from you and then we will ask you some questions.

Mr Zingelmann—I would like to make a short address, with some supporting documents. I sincerely thank you for giving me the opportunity to provide evidence to your committee. I respectfully request that the committee refers to the chart that I am presenting. That chart is a flow chart of actions I have taken to expose official corruption involving the smuggling of fauna and flora from Australia. The green squares represent actions taken by me to expose smuggling activities. The red squares represent corrupt actions by various state and federal officials to conceal my allegations. The red circles on the chart represent corrupt actions by the Queensland Criminal Justice Commission to protect officials represented in the red squares.

It is estimated that from 1984 to this present date, Queensland and federal officials and corruptly associated civilians have been responsible for smuggling \$300 million worth of foxtail palm seeds from the Cape Melville National Park. These officials are also engaged in the smuggling of Australian fauna, some of which are protected under the CITES agreement. In addition to fauna and flora smuggling, these officials are also engaged in large-scale drug-running that has mafia involvement. There is intelligence of large-scale gun-running from Cape Melville to Bougainville, and recent intelligence suggests that drugs have been returned to Cape Melville from same.

I will now provide certain facts and material that indicate that I am a reliable witness, and that corroborate evidence which I gave to this committee on 2 December 1995. I request that the committee refers to an extra 15 of my submissions on pages 148 to 161. With respect to the supply of New Guinea gold from Papua New Guinea to Australia I stated:

Another major area of supply of New Guinea gold is from people who reside near the West Irian border.

Please refer to my annexure of 17 January 1997, re a former Papua New Guinea minister, Clement Eric Hesaboda. That article appeared in the Brisbane *Sunday Mail* on 24 November 1996 and relates to where Hesaboda was arrested for running drugs to Australia from the West Irian border. That article said that how he went about it should have alarm

bells ringing in Canberra.

In December 1995, I provided evidence to this committee as to the identity of the principal civilian smugglers of the foxtail palm seed. That is contained on page 150 of my submissions. I tendered to the committee a two-page letter from the Queensland Criminal Justice Commission dated 18 June 1997. I quote from page 2 of that letter:

The Commission has determined that whilst there is evidence of illegal activities by numerous civilians, especially with respect to the removal of foxtail palm seeds from Cape Melville National Park . . .

I tender to the committee pages 12 and 13 of a CJC report dated 18 June 1997. The material relates to the principal civilian smugglers of the foxtail palm seed from the Cape Melville National Park. I submit that those names in the Criminal Justice Commission report are the same names I provided to your committee in December 1995.

I have provided to the Connolly-Ryan commission of inquiry into the effectiveness of the CJC a 950-page submission regarding matters concerning foxtail palm seed smuggling from Australia. My submissions to this committee form the intelligence section of my submission to that commission. I have been extensively interviewed at the commission in Brisbane by that commission's principal intelligence and security adviser.

At the conclusion of that interview, I was requested by the commission to provide a list of federal and state officials and civilians that are engaged in organised crime involving the smuggling of foxtail palm seeds from Cape Melville National Park that I considered should be afforded indemnities against criminal prosecution in return for providing evidence for a commission of inquiry. I tender to the committee a five-page letter, which I forwarded to the Queensland Premier, concerning an estimated \$300 million worth of theft of Foxtail Palm seeds from the Cape Melville National Park.

I tender to the committee a four-page document prepared by a Queen's Counsel and a barrister at law. I quote from pages 2 and 3 of that document:

Thirteen years ago, Mr Zingelmann correctly identified and reported criminal matters of significant public concern. He and his family has suffered greatly as a direct consequence of this. Such is the personal cost borne by a whistleblower.

Criminals have remained at large, corruption or incompetence has gone undetected. Native fauna and flora has been lost. A properly controlled industry providing employment, generating public revenue, whether through taxation or otherwise, could well have been established. Exportation of the foxtail palm seeds alone was a unique opportunity lost. These are just some of the immediate costs evident because the system chose to attack the messenger rather than deal with the message.

I am presently in possession of intelligence that indicates there are smuggling

activities on Cape York involving the export of dugong meat to South-East Asia. I have been told by an informant who alleges he was advised by a senior customs officer that the Australian Customs Service had intercepted a 200-tonne consignment of dugong meat that only represents the tip of the iceberg. The customs officer stated that the dugong meat was sold in South-East Asian markets for \$200 a kilo and that 200 tonnes required the slaughter of 50 dugongs.

My field intelligence research reveals significant evidence that there is an illegal trade in dugong meat by fauna smugglers on Cape York Peninsula. My inquiries reveal that the dugong protection committee of the Humane Society International also had intelligence of the illegal trade in dugong meat on Cape York. However, they were assured by the authorities that it was only a tribal trade.

The vast Lakefield National Park on Cape York was created primarily to preserve the stronghold of the rare and endangered golden shouldered parrots. Since the declaration as a national park, golden shouldered parrots have almost become extinct in that national park whilst they have flourished on nearby cattle properties. There has been extensive scientific research into the decline of the golden shouldered parrot in Lakefield National Park. I submit the only research required to determine the cause of the extinction of that parrot in that national park would be to peruse page 66 of my submission and see the evidence of Queensland national park officers extensively trapping and smuggling these birds.

Despite calls from all and sundry, the Queensland Criminal Justice Commission refused to broaden the terms of reference of their closed Cape Melville incident inquiry to include foxtail seed smuggling, fauna smuggling and gun and drug running because they claimed there were no grounds to suspect involvement by public officials.

On page 267 of the *Hansard* report on the unresolved whistleblower inquiry at Brisbane on 24 February 1995, the CJC gave the following evidence to that committee:

Despite that offer to provide further information in May 1991, we heard nothing more from Mr Zinglemann. He did not provide any further information and did not contact us again until October 1994 after the commission released its report into the Cape Melville incident, which incidentally and coincidentally involved foxtail palm smuggling.

As I told you he never actually raised seed smuggling with the commission.

Please refer to annexure 11 on page 130 of the submission where I have provided information to this committee re official smuggling of foxtail palm seeds by boat from the Cape Melville National Park and their involvement in gun running. That letter was received by the Criminal Justice Commission at the commencement of the CJC Cape Melville incident inquiry.

Please refer to annexure 6 on page 101 of the submission where I have provided

information to the former minister for the environment on 22 August 1994 during the course of the CJC Cape Melville incident inquiry with allegations of officials and politicians being involved in foxtail palm seed smuggling and gun running.

I tendered to the committee a letter from Molly Robson, the former minister for the environment, who in that letter advised that my allegations were serious and that she had forwarded them to the CJC for investigation. I submit that that letter established a prima facie case that the CJC lied to that Senate inquiry re foxtail palm seeds smuggling and that it also establishes a prima facie case that the CJC committed judicial corruption during the CJC Cape Melville incident inquiry.

Subsequent to all these proceedings that I have outlined I have contacted the federal Minister for the Environment and outlined the foxtail palm situation and smuggling activities on Cape York. The minister in this letter advised me to take it up with the various authorities that he nominated, and I have contacted them. They said that due to constitutional problems and the enormity of the problem they could not address it.

Therefore, I am suggesting the Australian government has two options—turn its back on what I am saying or have a judicial inquiry. The present law enforcement agencies in Australia are incapable of handling it, and that even applies to the National Crime Authority. The government is the only body that could possibly look at addressing this as it is far beyond the National Crime Authority.

CHAIR—I just make the comment, Mr Zingelmann, that we certainly have your submissions. They are so extensive we did not bring them all with us, but we are well aware of your submissions and we will cross-reference them from your address today. There is some adverse comment in your opening address and, as is always our practice, we will refer that to those bodies.

Senator HEFFERNAN—While the numbers of Australian birds et cetera going offshore is not surprising, given the evidence, it is alarming. I was wondering: have you been threatened?

Mr Zingelmann—I have. You will see on that list that the Queensland Police Service has threatened to plant drugs on me. I refer you to item 20, where the Australian Customs Service—this is the officer in charge of customs in Cairns—on receipt of my intelligence went and informed the fauna smugglers. Subsequent to that, I had threats from the fauna smugglers during the course of the unresolved whistleblowing inquiry that what I was doing was causing great danger to my life. Yes, every day of my life is like being in Vietnam. I understand the consequences. From the point when that Australian Customs Service officer passed my name on to the fauna smugglers, I have had no option other than to take them on. I have either got to beat them or I will die—one or the other.

CHAIR—It might be useful if you informed the committee that you are a former

policeman yourself. I am aware of it, but the committee may not be.

Mr Zingelmann—Yes, I am a former police officer. In 1984 I was a sergeant of police at the Atherton police station. I became suspicious of the conduct of a national parks officer and I was going to report him. The next day my district officer from the Mareeba police station—a commissioned officer of police—arrived and offered me a bribe not to report that national parks officer, but I did report him. Subsequent to that I had 12 months sick leave, suffering from acute anxiety, and I was discharged medically unfit.

That officer was a person who instigated the foxtail palm seed racket. He has got a house overlooking Cairns worth well in excess of \$1 million. The poor gentleman at the present time is putting modest \$400,000 extensions onto his house. The gentlemen from the CSIRO who also instigated this has got one bank account with \$2 million in it. It might be more viable to leave the Senate and go up to the cape! It is a shocking indictment on Australia.

CHAIR—We must be careful just how far we go.

Mr Zingelmann—I am sorry, I am being tongue in cheek there.

CHAIR—We understand your sensitivities.

Senator HEFFERNAN—In fairness to the committee, though, how would you know how much someone had in their bank account?

Mr Zingelmann—My sources of intelligence can penetrate a long, long way. Wherever I want to penetrate, there are people who hate the corrupt. They hate the fauna smugglers and they hate the officials who put their personal interest in front of Australia's interest.

Senator HEFFERNAN—Fair enough.

Senator O'BRIEN—You quoted a value for the foxtail palm seed. Can you put a quantity on it?

Mr Zingelmann—The amount of seed that is leaving?

Senator O'BRIEN—Yes.

Mr Zingelmann—This document from the Queensland Criminal Justice Commission is really addressing my allegation that they and the National Parks Service have been involved in a criminal conspiracy to pervert the course of justice. What they are doing is watering it down. They are trying to claim hundreds of thousands of seeds are leaving a year—that is in this documentation that you will be able to read later on—but

the true figures are somewhere between 20 million and 40 million seeds a year leaving Cape Melville. They are going out in \$1 million consignments.

They are trying to divert people reading this letter that they are going out in little packages. That is nonsense. The export of foxtail palm seeds is highly organised. It is the tip of the iceberg at Cape Melville. It is a minor offence up there compared to drug and gun running. Per the shipping container, they are passing it through customs marking it fraudulently as mixed seed or black palm seed or something like that.

Senator O'BRIEN—So is the seed worth somewhere between \$7.50 and \$15 a seed on your valuation?

Mr Zingelmann—That \$20 million a year is based on the figure of \$1.30 per seed.

Senator O'BRIEN—Sorry, I thought you were saying 20 million to 40 million seeds—

Mr Zingelmann—Seeds per year are leaving Cape Melville.

Senator O'BRIEN—So your \$300 million figure is over what period?

Mr Zingelmann—Since I refused that bribe, and the crooks have been allowed to run free.

Senator O'BRIEN—I see. Potentially is there a loss to a legal Australian industry, in terms of the export of that seed, of the amount of money you are talking about?

Mr Zingelmann—That is correct, Senator. I was approached by an Aboriginal elder on Cape York. The gentleman is now deceased. He was bitterly disappointed at the opportunity lost for his people on Cape York. They could have had an endless viable industry on Cape York had not the corrupt authorities taken it away from them. That could have been a very viable industry. He was very bitter to his dying day that this had been allowed to occur.

Senator O'BRIEN—Where does the seed go to? Is there any specific location?

Mr Zingelmann—It mainly goes to the United States—Florida, Honolulu—Indonesia.

Senator O'BRIEN—This may be beyond your knowledge, but can you tell us how long the palm takes to generate seed?

Mr Zingelmann—I believe it is a about a 10-year cycle of seed to producing

stage.

Senator O'BRIEN—To a tree that produces seed. You referred to the dugong meat matter. You talked about a 200- tonne consignment. I thought you said that came from 50 dugong.

Mr Zingelmann—I have seen a different figure to that 50, but that is what I was told. Somebody said it required 50 dugongs to be slaughtered to arrive at that.

Senator O'BRIEN—That is four tonne per dugong, isn't it?

Mr Zingelmann—I have seen the figure of 500, but I quote what I was specifically told. I think somewhere along the line a nought has been dropped.

Senator O'BRIEN—There is some unreliability about the number that you have given us, surely, isn't there?

Mr Zingelmann—I concede that. Senator, I must point out to you that I was aware of that discrepancy in figures before I even came here. I discussed it with the media today so I am not trying to hoodwink you.

Senator O'BRIEN—I know. I have not discussed it with you before and the evidence that you have put, accepted on face value, indicates that there is an obvious discrepancy. I personally do not know the live weight of a dugong. That is not really going to be resolved in this inquiry. I doubt that this committee would recommend that the animal be commercialised, because it is endangered, isn't it?

Mr Zingelmann—Correct. It is only a side issue too. Mr Chairman, I have been involved in aviculture for 40 years. I believe that the only useful way to deter smugglers is to give people the opportunity to captive breed birds. If they are investing in an establishment to breed birds, outlaying maybe \$100,000 to \$200,000 to make a proper establishment, and see somebody up the road smuggling birds, they will do them in because they have an investment in that. I honestly see that as one of the biggest deterrents you can have.

Senator O'BRIEN—One of the suggestions we have had from people in the aviculture industry is that a DNA test be performed on the breeding pairs so that, if the export of live birds was permitted, a DNA test could establish their parentage.

Mr Zingelmann—That is correct, Senator. I have been microchipping my birds for the last five years. I am breeding birds from Tibet, South America and elsewhere. I have paid up to \$12,000 for a pair of birds. As I said, I have been microchipping my birds for the last five years so I am above any nonsense. If you want to check my birds, then come and do a few blood tests to do the DNA. I think that is the only way to go.

Senator O'BRIEN—Do you support the export of birds taken from the wild?

Mr Zingelmann—No. I cannot see much benefit out of that, because you would flood the market overnight with certain types of birds such as galahs and so forth. There are fewer people involved, really—only the truckers. Therefore, the amount of people who are going to be affected by smuggling or who have an interest in smuggling is going to be less. I would detest the fact that a bird had been caught in the wild and sent overseas. It is only legalising the same standards as smuggling, in my opinion.

Senator HEFFERNAN—How do they smuggle them out up there? It would be a bit smarter than the suitcase operation, wouldn't it?

Mr Zingelmann—Definitely. If you go into my submission, you will see where they are going into the planes.

Senator HEFFERNAN—The answer is that it is in your submission.

Mr Zingelmann—They are going out by the plane load. This is a sad joke pulled on the public of Australia in that they believe that most of the fauna smuggled out of Australia is in suitcases—and the authorities want it that way. But the reality of the situation is that they are going out by the plane load. The Lakefield National Park is a prime area which the birds come out of. Drugs have been flown to the airstrips at Lakefield, the fauna is loaded onto the plane and is the return cargo. This is from sources. What I try to do is to get corroboration on all my intelligence.

The principal intelligence officer at the commission of inquiry in Brisbane said that the CJC should have grabbed hold of me as a treasure, because what I have got could solve most of this here. I have given you one of the solutions to protecting the native species: all I have done is to utilise the people of Cape York. They do not trust the authorities, but they are quite happy to give me the information.

Senator HEFFERNAN—Is the policeman—your superior officer—who offered you the bribe all those years ago still a policeman?

Mr Zingelmann—No, he has retired now.

Senator HEFFERNAN—What about the government official—is he still working for the government?

Mr Zingelmann—He is thriving. He is still in the national parks in a high position. The problem with the Queensland national parks is that if corrupt police, pre-Fitzgerald inquiry and post-Fitzgerald inquiry, have to leave the police service or get sacked, they go straight into national parks. You have got your crooks running your national parks. The facts are that during this Cape Melville fiasco, the operation 'Birdman'

situation which is in my submissions, I was competing against ex-police.

Senator HEFFERNAN—At the time, did someone investigate your allegations?

Mr Zingelmann—Nobody has investigated them, because the allegations were going to the officials involved in this corruption. This is what the Connolly-Ryan commission of inquiry has done. They have asked me to supply the names of people who should be offered criminal indemnities. Normal investigative procedures cannot address this now; it has gone well and truly past normal investigative procedures.

CHAIR—As there are no further questions, thank you, Mr Zingelmann. We will respond in due course.

Mr Zingelmann—Thank you.

[3.55 p.m.]

NAYLOR, Mr Lyall, Cape Tribulation Road, Cape Tribulation, Queensland 4873

CHAIR—Welcome. In what capacity are you appearing before the committee?

Mr Naylor—I am appearing as an individual who has had a lifelong interest in wildlife, and particularly captive husbandry, with a greater emphasis on reptiles and amphibians. Out of that interest I have spent a good deal of my working life in zoological institutions, both in this country and overseas. I had the privilege of working with some whom I consider to be Australia's best naturalists—certainly early naturalists—and I was able to glean a good deal of experience, expertise and knowledge from these people.

My concern about the direction that wildlife protection is taking in this country is that I think opportunities are being lost and the emphasis of trying to prevent the ongoing decline of wildlife species is being placed very squarely on the shoulders of people interested in wildlife. The real issues contributing to the decline of wildlife species, or natural resources in general, are not being addressed. I would like to cite some of those examples.

It is a clear fact that wildlife regulation strictly controls the keeping of native wildlife and certainly tends to inhibit any sort of behavioural research that may take place. My interest stems not from a commercial interest but from a lifelong interest in wildlife. I find a great deal of joy in keeping and breeding wildlife species. As I say, I confine my interest mostly to smaller wildlife forms such as snakes, lizards and amphibians.

There are many figures bandied around about the annual take of wildlife from the wild. I tend to adopt the attitude that restriction does generate demand. Unless there is a more liberal approach to the breeding of wildlife to enable people to keep protected fauna, I cannot see that situation changing. There will always be an illegal or unauthorised take from the wild state. There is a figure, one decade old, that a human induced road kill of reptiles and amphibians on an annual basis is somewhere in the vicinity of 5½ million animals in Australia. I suggest to you that the take from the wild for captive observation or the keeping of wildlife would not come anywhere near that figure.

I live in an area of high natural values. I live in the Daintree area. I own land there. I have seen the process where the access road into the Daintree went from a dirt, four-wheel drive track to a sealed road. Anecdotal evidence from long-term residents there suggests that road kills were very rare. We now see an incredible number of animals killed on those roads because drivers are driving very quickly at night when most of the animals are active. We are having endangered species killed on the road whereas that was not the case in the past.

To see a clear demonstration of a very real concern about declining wildlife values,

we would see some proactive approach to those sorts of issues. At this point, it seems to be left to the local council to make a decision about traffic-calming devices. I find it very difficult to accept that we can have endangered species killed on roads and that is deemed to be no threat to the overall population. Yet, in some cases, people want to take a pair of animals for breeding observation. I even give credence to these animals as an educational tool for children. I think they should get access to wildlife and have some understanding of it. I feel that, when they are familiar with their native wildlife, they will then demonstrate some concern about its long-term survival.

I have worked in zoos for most of my life and I have certainly gleaned a lot of experience from that. I have specialist skills in animal husbandry. I see lost opportunities in this country due to regulation. It seems that there are very few avenues for people actually to cultivate skills. You have only got to look at the wish list for employment at any of the major zoos in this country to see that it goes on for years. They have got so many applicants wanting to take on vacancies in a zoological environment to get some understanding of wild animal husbandry and yet, outside those limited opportunities, there is no scope. You can have limited access to some captive animals but I feel that regulation was introduced prior to significant numbers of animals being held in captivity.

There has been a good deal of criticism generated about captive breeding and about how hybridisation occurs, that animals of different geographic origins are being bred and, therefore, the product of these breedings has absolutely no value to conservation. I suggest that has come about simply because of regulation, that the animals were not available. So even in a zoo situation it was a case that there was a community demand. A zoo is a place that is there principally for display and there is a community expectation of some of the animals that they will view in those establishments. To keep an ongoing display, it was a case of breeding whatever was available to them at the time.

I have a letter that I think is relevant from the point of view that I have tried to gain some understanding of the motivation of the architects of some of the legislation revolving around wildlife. The letter is from a previous Queensland environment minister. I focused on a statement where he said:

It is conceded there is a very strong push by some Herpetologists to permit the taking from the wild of species of interest to them. However, theirs is a personal perspective only and probably without consideration for the total population. Experience has shown that when a colour variation in a snake or lizard species has been identified and made public, within 3-5 years the occurrence of these forms has diminished dramatically in the wild.

I would love to see the supporting documentation for that statement.

CHAIR—It seems to be an opinion.

Mr Naylor—Yes, and I think it is personally motivated because he has an aversion to the keeping of wildlife. But the point that I would make—and, I emphasise, so do many

other commentators—is that habitat destruction is the primary cause of wildlife decline. Unless we can guarantee the integrity of national parks—and I feel that there is a lot of criticism from circles that national parks are not adequately managed—I do not know whether we can afford to be focusing on individual animals and suffering the taxpayer funded cost of having to administer those regulations.

Another interesting article is by Peter Mirtschin, who operates a venom extraction business in South Australia. He makes the assertion:

Is there encouragement by the wildlife Departments for the keeping of native animals? Do they actively promote the keeping? The truth of the matter is that wildlife regulation has "been far more destructive than a well regulated legal trade would ever have been".

That was a quote from Tim Flannery, who is a research scientist at the Australian Museum. He goes on to say:

We spend an estimated \$120 million a year, or \$1.2 billion over the last 10 years funding our wildlife authorities and the results are still on the negative side of the ledger. Despite some gains, the overall story is one of loss. The monies allocated to preserving our wildlife is distributed between the 9 wildlife authorities who, in each State with the Federal body in Canberra, administer these functions. There has been a growth industry in legislation but little in terms of reversing the negative impacts on our wildlife and the losses that are occurring.

To try and illustrate the futility—

Once again this is Mr Mirtschin's point of view, but I can see some relevance in it—

of one of the preoccupations of the current regulative system in Australia, I offer the following example: Recently 9 Australian wildlife authorities and customs authority, with their considerable taxpayer-funded resources, admitted that in 70 prosecutions in a 9 year period between 1984 and 1993, they saved 956 animals and eggs from wildlife traffickers. Sounds impressive? Or not? One feral cat is estimated to kill 800 native animals in one year.

I go to the issue of keeping domestic animals as opposed to keeping native animals. We refer to cat laws as opposed to wildlife laws for native animals and the permit and regulation limitations. Take from the wild for cats is zero. For native animals, a permit is required but rarely approved. There is no permit to keep cats in most states and a minimal one in South Australia. Native animals require a permit to keep.

No transfer records are required for cats but they are for native animals. No interstate import-export permits are required for cats from both states. There are no cage limitations for cats, but they are enforced, or there is pressure for them, for native animals. No periodic returns are required for cats but are for native animals. Cats are readily available in pet shops or privately. Pet shop dealerships require licences for species of native animals. Public display licences are not required for cats but for native animals in

some states.

I suggest to you, looking at my local situation in the Daintree region, that you could have somebody move into that area with a dozen cats and there is absolutely nothing anybody could do about it. The impact cats have on native wildlife is readily recognised.

CHAIR—This might not be a fair question, so you do not have to answer it. Would you not like to see a significant increase in population in the Daintree?

Mr Naylor—I can see problems arising from it.

CHAIR—All right. It was not a fair question, but I was just interested in your response.

Mr Naylor—Since I am there, I can see where it is coming from. We could focus on that. It is a shame that the values were not recognised prior to some land management decisions being made.

CHAIR—Do you keep any native animals yourself?

Mr Naylor—I do not at this point, but I certainly have for many years. I am still very interested. I am interested in the industry as a whole. My son has a very good interest and I see that opportunities are not available to him that were available to me. I feel that youth should not have to deal with some of the heavy pressures applied to them when keeping a couple of lizards for breeding purposes to learn from them, and then interacting with other school mates who develop a compassion for those things. From him, I think it is a very positive rather than negative stance. Given the other pressures confronting wildlife, the more people who understand it and have some sympathy for it and for its plight, the more positive the outcome, rather than having it over-regulated and too much of a minefield to get through, so we will not bother.

CHAIR—In your submission, you talk about inadequate protection of threatened species. Would you agree with those who have appeared before us that, if there was a regulated industry in the breeding and keeping of native wildlife, that would be a much better way of proceeding?

Mr Naylor—A positive outcome. I can see opportunities for remote communities, as has been touched on. I have a great interest in biological control of pest species. I can see large pythons, monitor lizards, et cetera, from breeding stock being used in farm land to control pests. It is a case of providing shelter sites for those animals by enhancing habitat. They may fit into that formula. I think that has not been explored sufficiently enough. A lot of those animals are quite attractive. They have growing public appeal. But I live in an area where most of the residents would kill every snake and lizard they see, if

they considered them a threat to their poultry or their birds. The fact that those animals are legally protected has not protected them at all.

CHAIR—No, I could tell you a story about a carpet snake, but perhaps I will not.

Mr Naylor—That is exactly my point anyway. These things and their movement are strictly protected to the letter of the law. There are codes of practice to keep them and yet the bulk of Australians really do not share that concern. I think the emphasis on individual animals is overstated and we should be looking at the populations as a whole. National parks are set up to protect their environments and crucial ecosystems. The protection of those protected areas is paramount.

CHAIR—I understand your criticism of some of the laws that you feel are not helping. One of the terms of reference for us is to work out: ought there to be national standards?

Mr Naylor—I would certainly agree with that. I think it is a nightmare as far as trying to organise any sort of an understanding of how the laws are framed from state to state and territory to territory. My understanding was that the territory government permitted an amnesty and a take from the wild prior to introducing regulations controlling reptiles and amphibians certainly.

In many cases if people are prepared to devote the funding—and it is not a cheap exercise to build enclosures and address all their thermal and food requirements et cetera—they are making a pretty sound commitment there. If these people were prepared to go out and take a representative sample—a breeding group of animals—they can be observed and monitored for what they are. If they fail, you have good reasons to make them restrict the take, but I think the opportunity should be provided. At the moment I have this real concern that animals are fetching exorbitantly high prices and regulations assist in that end.

CHAIR—Because it creates an illegal market that is very lucrative.

Mr Naylor—I have heard statements about Australian green pythons being sold in southern states for \$30,000 a pair. There is no source for these animals. They are totally protected in Queensland, et cetera. There is some criticism that New Guinea bloodstock has entered Australia. My contention would be that, from what I know of Edward Halstrom and the establishment of Taronga Zoo, that would have been the source of that material. It is no good trying to close the gate after the horse has gone. I think that is the way the situation is.

From a personal point of view, I tend to think that green pythons, having such a limited distribution, could be serviced quite adequately in a captive environment. We have researchers looking at DNA profiles and taxonomic relationships. As I stated in my

submission, I have been exposed to research projects where they are taking large numbers of animals and euthanasing them for study purposes. If there were captive populations of known geographic origins, that material could be provided without the need to destroy animals.

Getting back to state to territory and crossing state border difficulties, I tend to feel that a national approach is required. The conservation concerns for species occurring in north Queensland are of concern to every state and territory. I think that is a necessary one. I have just recently returned from Melbourne where you can walk into pet shops and there is a range of native fauna for sale. I think it is fairly difficult for someone to fathom that they can do that in Melbourne but they cannot do that in Cairns.

CHAIR—Living on the cape, would you suggest that there is a lot of illegal activity?

Mr Naylor—I am not privy to it. I certainly have had no exposure to it. I could give you no direct evidence as to such things.

CHAIR—That is wise. There is a lot of criticism—and we have had some of it in our inquiry—of zoos. Do you share that criticism having worked in them?

Mr Naylor—I found zoos in the initial stages to be very interesting, quite fulfilling institutions and fantastic as a career path. What I would suggest is that zoos have limited resources. They also are now very much taking on international responsibilities. I still have quite close contact with Taronga zoo and the staff in that facility. Certainly, with limited resources, they are diversifying into recovery programs for reptiles from Fiji, the Dominican Republic, et cetera.

I think there has to be a very clear direction and the issues and the problems confronted by indigenous wildlife have to be very much addressed. I tend to think that, given the limited resources of zoos, private individuals with the interest and the necessary expertise could be given permit applications that were merit based, rather than no discretionary powers and, 'Sorry, we can't help you.' I think they should be based on your experience and your demonstrated track record and you should be able to put up a case. If you are prepared once again to fund a project such as that, keep a species, breed it and distribute it, it is positive.

CHAIR—If I just spell it out a bit more, what the witnesses who do not take your point of view were saying is that the keeping of any native wildlife at all in any kind of captivity is cruel and inhuman. I suppose that is a bit of a contradiction, but is cruel anyway.

Mr Naylor—I am sure you can make up a response in your own minds about it. I find it very difficult to service this idea that animals are furry people or scaly people. We

are looking at it through human eyes and the requirements of animals are demonstrated by their behaviour. If they will not thrive in the captive environment, they fall over and they die. If they are thriving, reproducing and feeding, their health is good.

Animal welfare legislation covers all of that and it will cover any concerns. The environment department—as does the RSPCA—has demonstrated quite readily that they can prosecute and get positive outcomes for breaches of animal welfare legislation. I tend to think that whether animals actually suffer in captivity could be highly disputed. Having seen geckos dismembered by centipedes and things like that, it does not look very pleasant out there in the wild either.

Senator O'BRIEN—I have just a couple of questions relating to part of your submission under the heading 'Enforcement of wildlife regulations'. You are fairly critical of the agencies here, I take it. Have you a comment as to that?

Mr Naylor—I am critical of the treatment. That would be my position. It stems from experience where I dealt with national park officers years ago who I almost considered to be colleagues. We seemed to be going in the same direction. They touched base with me all the time. The animals I was keeping were familiar to them. They would come back six months later and say, 'That is looking great. That has reproduced' and they were familiar with what I had. I am finding it very difficult to deal with enforcement officers, because, without being overly critical, I wonder whether there is a sincere heartfelt interest in wildlife issues or whether it is the point of law.

Senator O'BRIEN—Can I say that I took this from your submission—and tell me if I am wrong—that deep down your view is that the members that you are dealing with and that you are referring to in this submission were looking to find fault with an identifiable 'suspect' who was in place. They had a set of paperwork, you could put them through the wringer and see if you could put a cross against part of their paperwork.

Mr Naylor—You could adopt that attitude, certainly. I feel that it is a small interest group in this country, given that Australia does have such a small population. We do not have a political voice. I tend to think that many of these people, because of their interests, tend to sit quietly and live in rural areas. I could adopt the attitude that it is an easy focus and the hard issues are not being addressed. That would be the essence of my submission, because I think that the true issues are not really being addressed as far as wildlife decline is concerned.

Senator O'BRIEN—Thank you for that. I think we would be probably getting into the realm of speculation if we go too much further.

Mr Naylor—Thank you very much.

ACTING CHAIR—Thank you, Mr Naylor. In the absence of the chairman I thank

you for taking the time to come and see us. I am sure your evidence will be valuable and given due consideration by this committee.

Mr Naylor—I appreciate the opportunity. Thank you very much.

[4.39 p.m.]

COOK, Mr Keith Charles, Director, Australian Crocodile Traders Pty Ltd, PO Box 5800, Cairns, Queensland 4870

CHAIR—We bid a very warm welcome to you. If you would like to make a brief opening statement, we would be very happy to hear it.

Mr Cook—I am the owner of a couple of businesses that relate to crocodiles, including the Cairns Crocodile Farm and Australian Crocodile Traders. We make leather goods, we trade in indigenous meats and we are involved in tourism. We trade internationally in crocodile related goods—skins and the like.

I think you have already had quite a few submissions from other crocodile people, so I will not labour that point. I will quickly swap hats as I am also a member of ACSUG, the Asian Conservation and Sustainable Use Group. Maybe you have not heard much from that group so I will talk wearing that hat.

CHAIR—That will be useful.

Mr Cook—I have not prepared anything so bear with me if I just ad lib. ACSUG is a group that is made up of Asian countries—Cambodia, Laos, Indonesia, the Philippines, Japan, et cetera—and Australia. It is made up of groups that have interests in conservation and sustainable use. The main thing that Australia brings to that group is that we are notorious for having one of the worst extinction rates in the world with over 400 species being wiped out in the last 200 years. That makes us slightly different to a lot of the Asian countries that do not have anywhere near those extinction rates.

The interesting thing is that of all those species that have become extinct, only one was through consumptive use—the Tasmanian tiger. And that was really not due to consumptive use, it was due to hunting because it was attacking an introduced animal, the sheep. All other extinctions have been caused by annihilation of ecosystems for monoculture and introduced predators and animals.

One of the main objectives of ACSUG is to bring to the attention to people that conservation and consumptive use are not mutually exclusive. In fact, it is a very rare and unusual case where consumptive use will lead to extinction. Basically, if the ecosystems remain intact then the species are quite resilient. The crocodile industry is a great example of that whereby populations have just rebounded internationally in just about every country they occur in while consumption has grown at the same rate.

We are at a stage now where we have gone the full circle. The crocodile is a funny animal in that it was one of the first species to be closed down after open-slaughter exploitation occurred. People had a legitimate interest in not having the species become

extinct and therefore they blanket banned the use.

The next stage was to say, 'Okay, maybe we can keep this species for its useful products, but through captive propagation.' That stage happened about 20 years ago. After a while they realised, 'Hold on, there's still a lot of crocs out there so maybe we can consume them at a sustainable rate from the wild.' That was the next move in the form of flood prone eggs or other less intrusive ways of harvesting the animals. That proved in Zimbabwe, Australia, Florida, Louisiana, Colombia and Venezuela to still not bring the population to anywhere near an adequate balance and check. So controlled harvest of adult and juvenile animals occurred after that. We have gone the full circle. We started with, 'Don't touch it', and ended up with, 'You can touch it, but do it in a way that allows it to be sustainable'.

Whenever I go to meetings overseas I am the bad guy. They say, 'You're a crocodile farmer, are you?', and I say, 'Yes.' They then say, 'How many wild eggs do you get? How many crocs do you take from the wild?.' I say, 'None.' They say, 'So your out there competing with us for markets and you have no connection with maintaining the wild population.' I say, 'No. Frankly, if they became extinct then that would be better for me. My prices would go up because I would be the only one with crocodile skins left.' We have been doing everything we can to get away from that fact.

You have probably heard that Papua New Guinea has a program that has been in place since 1968 or 1969 with use of wild crocodiles. It is the only income in many rural areas. I have got a business up there that trades in skins. It is a fact that most kids do not go to school in the Fly or the Sepik unless there is crocodile income. Every time my buyers come to me to buy crocodile skins, basically they do not go to them. So we are in direct competition for the use of the natural ecosystem. In my case it is not the use of the natural ecosystem—I do not give a stuff about the natural ecosystem because I do not have any part in it. Basically they have a lot of pressure on them for logging, and they have a lot of pressure on them for coffee plantations et cetera. If there is no income from any other means, that is what they will go to.

Australia is unfortunately trapped in this cycle that seems to be developing in the Western world. We are getting more and more urbanised and less and less in touch with the fact that quality of life is related to consumption, and consumption is related to destruction. Therefore, if we wish to consume sustainably, it is almost inevitable that we have to use natural ecosystems to supply us with products. The emotive debate that is hitchhiking on the back of this, which relates to whether or not it is okay for humans to kill other things directly, seems to have the effect that we are cutting off our nose to spite our face. So that we do not kill things, we are almost annihilating them at the same time. That is especially so in respect of lots of countries around the world where they do not have a framework in place to utilise their wildlife resources properly and so they are utilising them improperly.

A problem that we as crocodile wildlife users find in Australia is the poor understanding of the realities of conservation—sometimes in government but generally speaking among the public. One of Australia's greatest assets is that most of its major ecosystems remain intact, so it is difficult for us to promote ourselves as green in so far as we supply products. That is not necessarily so in Queensland's case, because we are not green, really, we are just a monoculture of crocodiles that has no connection with the ecosystem, as I have explained. But certainly in the Northern Territory and Western Australia, it is difficult for us to promote that, because there is very little understanding amongst either government or the public as to the realities of conservation and how they relate to the consumptive use of these things. It is easy to sit down and have your bowl of Weeties in the morning and forget the fact that we wiped out most of the wheat belt areas of Western Australia and southern New South Wales to produce the wheat; but try shooting a koala and it is the end of the world.

There is a very distinct emotion-based influence in the debate at the moment, that the African issues highlight clearly. It is obvious that not to use wildlife, or to make it illegal, does not protect it. To my knowledge there is not one major species that everybody is worried about—one that is on the brink of extinction—that has been helped by banning the trade or the consumptive use of it. We have had the black rhino banned now for 25 years, but the numbers have just dwindled away to nothing. Banning does not work. It is as simple as that. There is not one shred of evidence out there in concrete terms that non-use of wild resources under a legal framework necessarily results in their survival.

Senator O'BRIEN—What about crocodiles themselves?

Mr Cook—I would say that in most countries around the world, their populations have been very much enhanced by their consumptive use.

Senator O'BRIEN—But the growth in the stock of crocodiles in northern Australia, on the evidence that we have received, has grown many, many times since the ban was put into place. If we wanted to debate the proposition that you are putting forward, it seems that, if something has a value, then a ban can only be successful to the extent that you can enforce it. The problem with the black rhino is that there has not been the ability to enforce any ban because of the nature of the government, the borders in Africa, corruption and all of those issues. That was the issue with the ivory trade as well, I would have thought.

Mr Cook—There are a lot of issues. You could look at the tiger debate. Tigers are not really being wiped out for tiger paw soup. They are obviously being wiped out because of ecosystem loss. They have got no habitat left. On the one hand you can find excuses for bans not working in countries that do not have the infrastructure to put it in place.

Senator O'BRIEN—I am not saying that there is not an element of truth in what you are saying.

Mr Cook—You cannot just harvest anything outright. There is no doubt about that. That is what monoculture is; it is total and utter conversion to human use and nothing else. But equally so, you cannot leave an ecosystem in most parts of the world intact and not take goods and services and whatever else we pull out of them. We just do not have the luxury of the space, food, shelter, clothing, housing and all of the other things that we just demand to consume in ever greater quantities.

CHAIR—There were a couple of things that I wanted to pick up. I get your general drift. It is a point that can be well argued and you have done that. The exception from my point of view to the idea of prohibition and the stopping of commercial use is the African elephant where the stopping of the ivory trade seems to have meant a recovery in numbers. But that may be because it is a particular animal. I do not know.

Mr Cook—It is a difficult point to argue. As for the African ivory situation, I worked in Zimbabwe for a long time and really the recovery was in Zimbabwe, Botswana and South Africa. These are the countries that are the only ones that wanted to consume the damn things on a sustainable basis. Yet Namibia, Zaire and everywhere north of there they said, 'We don't really want to consume them sustainably', and that is where they are in trouble.

Senator O'BRIEN—Greatest land pressure.

Mr Cook—Yes, it is a difficult question. There are very, very little things you can point to in order to say that actual banning of use has been of any great benefit to the recovery of the species. Even if you could find five or 10, that is a pitiful amount when we have lost 400, for example, when you could have gone out there and tried to reduce the feral animal pressures or you could have tried to reduce the total annihilation for monocultures. You would have saved 400.

Senator O'BRIEN—Could we step back a point? It seems to me that what you are saying is true for the species that have not had a commercial value and really have been declining because of a decline in their habitat. The ones that have been under pressure from hunters have been supported or preserved by the ban structure. If you put a ban on hunting an animal that is not declining because of hunting, it is going to have no effect. If you put a ban on hunting the crocodile in Australia, whose population decline is entirely due to hunting, then you would expect an effect and in our case it has had the effect.

Mr Cook—I think Australia is a slightly different case, because we have the luxury of having in existence monocultures to support our lifestyle. We have already wiped out 80 per cent of the vegetation. But most of the rest of the world, with the exception of North America and Europe, have not and they have not got the quality of life

because they have not done all of the damage we are doing here. So in a way it is difficult for us to argue anything in regard to them, if we do not manage our resources a little better.

Sure, we do not have to have these things to keep our quality of life up and stable, but it is good management to do it that way. It makes sense. We never seem to factor in the environmental problems of monoculture. For example, we have the most biodiverse area in Australia surrounding us and instead we are drinking it in our cups of tea. Every time we put a teaspoon of sugar in there, basically we have just said, 'We like your rainforest, but instead we'd prefer sugar in our coffee or coco cola.'

So the issue of whether hunting—which is what it seems to boil down to—is a villain that needs to be brought under control to save our dwindling biodiversity is really an irrelevant point. It is irrelevant to the point that it is two per cent of the animals that are in trouble.

Senator O'BRIEN—Your first proposition was that there were 400 extinct species and one was made extinct by man deliberately through hunting.

Mr Cook—Yes, not for consumptive use, though. That is an important point.

Senator O'BRIEN—It was hunted to extinction. Whether it was for eating or to protect stock, it was hunted. It was chooks, sheep or anything. It was a bit of sport sometimes as well. Take the crocodile, for instance, it was verging on extinction because of hunting and we saved it. We fall into a trap trying to say that protection does not save animals. In a general sense, protection has a role where it is a measure which can save it from the circumstance that is causing extinction. But what you are saying is that there are so many other extinctions that are caused by habitat and not caused by the degradations of man.

Mr Cook—I am agreeing with you totally, but at the same time I am saying the sheer amount of energy that you might be putting into this right now is really very misspent if you are here for conservation reasons.

Senator O'BRIEN—Do not make any assumptions.

Mr Cook—What could you hopefully possibly save from extinction by stopping any trade in wildlife in Australia? Do we have anything verging on extinction through wildlife trade? I cannot think of one thing and yet we have all these verging on extinction and we are out there worrying about the things that are not.

Senator O'BRIEN—As I say, do not assume that this committee is leaning one way or another.

Mr Cook—No. I am not making that assumption. I am talking from an ACSUG

point of view, because the crocodile thing has been done and that is ACSUG's main worry. In Asia people have not yet had this social guilt put on them, that all the woes of the world are out there because we kill these things. It is not because we consume them and everything around them, but because we kill them. ACSUG's main emphasis is to try and get in there before Asia gets this emotion based bias and look at this rationally and clearly. If you truly want to be a conservationist, the only answer is to reduce consumption and no-one is prepared to do that.

I have never met anyone yet who does. I have met David Suzuki, Attenborough and lots of people through conservation. I have never known one of them not have three houses, two cars, eat first class every night, wear two suits and basically consume at the same rate as the rest of us and yet supposedly they are conservationists. So there is a deep, deep irony in this whole debate. I just cannot understand the point of people who are supposedly conservationist, but in reality are just expanding their morality and ethics to not wanting to kill things directly themselves or see it happen. It is alright to have a bulldozer push it all over when you are not looking, but by God do not let us see anyone harpoon a whale or it is the end of the world.

In summary, I agree with you. There is a place for banning trade, especially when species are perilous and there is definitely no place at all for open slather consumption. But there is plenty of opportunity there to have your cake and eat it too. Just about every species in Australia has a great fecundity and fertility rate. Basically—unlike whales which might have one baby every two years, where your opportunities to harvest sustainability are greatly limited—crocodiles for example, have 50 offspring every year for 50 years in order to produce only one to replace themselves. So we have got 2,500 that do not need to survive in order for one to survive and to be back where we started. This is repeated again and again and again in just about every species, birds, marsupials, et cetera.

Senator O'BRIEN—So the issue with crocodiles in the wild is: when they and man meet head on in a challenge for habitat who will win.

Mr Cook—I guess that happens continually now in northern Australia as the population comes back. Basically, the territorians are prepared to live with them more because they have been educated to appreciate them more. Queenslanders have been taught that they are vermin and are not allowed to be in the area where school kids are or anything like that, so there is a totally different mind-set here. So you have to draw the line in a different place otherwise, you would get everybody offside and it is the end of the line.

But the ultimate goal should be that people accept that they are dangerous, they will kill you, and that is the sacrifice people make—we have to lose one of us every now and then if we want to still have them around. But I do not think that has any real relationship to conservation one way or another, or management, really. It is sort of in there, but it is not really related, it is just an unusual quirk that this species happens to eat

us. There are not many other species that do.

Senator O'BRIEN—Not in Australia.

Mr Cook—And that is great from a tourism point of view, because that is what gets people there—people want to be scared, so they show up to have their pants scared off.

CHAIR—Like a horror movie in the wild.

Mr Cook—Yes, and sharks are the same. But, at the end of the day, it is still just basic conservation whether you manage them or consume them or whether you do not. We are very lucky with crocodiles that the things are worth a lot of money, so it is much easier to consume them more gently than with other animals, like fish, for example, where you have to pull thousands of tonnes out to make it justifiable.

Senator O'BRIEN—But then we have to protect them because we have overfished.

Mr Cook—That is right. So I think if you go down the route of saying that we will try to consume our resources, we have the wonderful luck to still have enough out there to actually be able to do it on a sustainable basis—unlike Europe which has totally destroyed its ecosystem—and then it is a matter of having people who specialise in what population dynamics really mean to the health of a species and that sort of thing. Just having it there, is that enough, or do you need the full cross-section of adults and juveniles and all of that sort of thing?

You are getting into new questions and new problems every step of the way. But, at the end of the line, we have already upset the apple cart, so it is not as if we can leave anything pristine anymore. Every time we put a barra net up one of these creeks, we are upsetting the crocodile population and its stability and its naturalness, if you like.

So, the horse has bolted now, there is no such thing as a natural ecosystem. Cape York is full of cane toads and foxes and God knows what—pigs and everything. Forget this idea that we can leave our ecosystems alone and, 'She'll be right mate, this is all pretty and we can have *National Geographic* writing about it.'

Senator O'BRIEN—So it is no longer a wilderness. You agree with the Aboriginal community that—

Mr Cook—There is no way that it is wilderness, not anymore. I spend a lot of time with the Aboriginal community on Cape York because they supply me with the crocodiles and one thing or another. You see more feral animals than you see native animals, so it is hard to imagine how someone could think it was a wilderness. It could

be, if we took any interest in it, but they are out there trying to stop people killing things instead of actually trying to save species.

It is an unfortunate thing. If 10 per cent of the emotion and effort that was put into trying to stop us kill a few things that make *National Geographic* documentaries interesting was actually put into genuine conservation, we would probably have lost half as many in Australia as we already have, and yet there is no control program for feral animals in most of Australia. If you want to conserve things, do something with that and you might get somewhere.

Senator O'BRIEN—And your crocs will help get rid of the excess—

Mr Cook—Yes, we have got somewhere to put all of this meat. We would not want it to rot in the field as that would upset the balance. The other thing is, we are bit embarrassed in Queensland still not to have a sustainable use program. You have probably heard that from all of the other crocodile industry representatives.

Senator O'BRIEN—Not quite. I do not think the Edward River representative was embarrassed about that.

Mr Cook—Yes, their motivation is fairly strongly the other way because they are the power plant of our captive production. But I think that is obvious self-interest there. It is easy to try to not upset them and just let them have their own land as a resource for producing wild stuff.

Senator O'BRIEN—What do you think about the proposition which has been put to us that the Aboriginal communities ought to have very strong input into any utilisation of native wildlife from the cape?

Mr Cook—It keeps coming back to the same argument of who owns them. At the moment the Crown owns them. If the Aboriginal community is to have input, it is saying that they have ownership. That is a legal quarrel. I think you should do it so that is definitely the case because another argument is that, in certain areas, they have strong cultural attachment to the land and ownership in some forms, however you want to look at it. That is another debate raging at the moment.

In those areas, definitely there is just no option. You would be taking something that they own and feel a close connection with. Not much of Australia is actually like that. Eastern Arnhem Land is the area that comes from. There is not a lot of it in the rest through the Kimberley, up Daly River and up to Darwin.

It is a pure case of people deciding that Aboriginal people have ownership of the animals and plants. I would only really feel good about that if the people in the area did have some form of ownership through their cultural connection with the land. But there

are a lot of townships in the north where people come from all over the place and a lot of central people that are not coastals have been moved there over the last 50 or 100 years. To give them ownership of the animals seems a bit strange because the Crown gets the value out of it as well.

Senator O'BRIEN—So the ownership is the Crown's to dispose of?

Mr Cook—The way it is written at the moment the Crown owns all wildlife.

Senator O'BRIEN—So if the Crown thought there was social good in that, would it be a fair decision?

Mr Cook—Yes. I think it would be a fair decision if they could prove that those people did have some form of ownership over that area and the land. But just being there—

Senator O'BRIEN—But what if the Crown decided that there was social good in making that decision? Not that they owned it, but that there was social good in it.

Mr Cook—From the point of view of giving employment prospects, there is no problem at all with that. Edward River is a good example. It is difficult in a place like that to give ownership to something to a community because, as soon as it is communal, nobody really owns it. It is back where you started. That is why nobody takes any real interest in running cattle or looking after the crocodile farm. They do if they work in a crocodile farm.

There is no broader interest because you say, 'All right, we will give it back to you, but to all of you.' No-one can actually use it because it is not theirs at the end of the day. If it is granted to them, there is going to have to be true ownership that they can buy and sell and trade and deal with, so that they can take some interest. If it is just a general, 'Oh, it is all yours. Your council can decide who gets it', it is difficult to explain that to the public. In reality, that is the way it works. As soon as you give it to the lot, nobody is interested.

Senator O'BRIEN—What about the principle that the white community has used from time to time of cooperatives?

Mr Cook—Yes, it seems to work really well in Gove, for example. The totem of those people is the crocodile, so they do not want to kill them themselves. They want the value of it, so they allow other private operators to be involved in it. That is a win-win situation as far as I can see it. I think that would work in Queensland just as well.

The economies of scale have to be taken into account with crocodile farming, like everything else. It is not practical for every Aboriginal community, say, on Cape York to

harvest their own eggs, because they just do not have the economies of scale to have the plane there at the right time, build the incubators, et cetera. No matter what happens, at the end of the day, there will have to be some amalgamation which can only really happen through private concerns negotiating with the people.

CHAIR—The subject of smuggling keeps surfacing in this inquiry. It is not part of our terms of reference but obviously it is a form of commercialisation. With your experience and background in the cape, do you see that as a real issue?

Mr Cook—I do not think so. Crocodiles are unusual. A crocodile skin is a useless piece of nothing until it is tanned, and the tanning of crocodile skins is such a specialised job. You might have this many people produce a skin but the skins then go through very narrow channels when they get tanned. Therefore, it is a simple procedure to police.

For example, at present there are only two tanneries in Australia and no matter where the crocodile came from it would have to go through there. It would be stupid for these tanneries to risk their business and livelihood for a couple of illegal skins. The value is not there for a tannery because a tannery is only the value-adding part that might add 20 per cent or 30 per cent to the value of the skin. They are not getting the benefit of—

CHAIR—The value is in the bulk.

Mr Cook—Yes. It would have to be large-scale poaching to be significant, and then what would they do with the skins? There are only a couple of manufacturers and they are attached to crocodile farms. We have no interest in wild harvesting when we have tens of thousands of our own crocodiles.

CHAIR—I can certainly see that in terms of crocodiles. What about other things like snakes and birds?

Mr Cook—Those sorts of things would have to be volume based businesses to be worth while, in most cases, whereas crocodiles are a bit different. We can harvest a few here and there and make it justifiable. But if you are doing it in volume then the price is going to plummet and make it almost worthless. Why bother poaching when something is worth \$5 or \$10? Why take the risk? If a certain species were so few that it had genuine value, that might be different. For example, a crocodile might be worth \$600. If there is a bird or a snake worth \$600 then that might be a different case. It is up to the management authority to decide how they deal with those. They could deal with it like they do with a crocodile and use a non-reusable tag and everything that does not have a tag is history.

CHAIR—Thank you very much, Mr Cook.

Mr Cook—It is my pleasure. Thank you.

[5.17 p.m.]

KUCH, Mr Ian Lloyd, Executive Officer, Bama Ngappi Ngappi Aboriginal Corporation, 28 Workshop Street, Yarrabah, Queensland 4871

CHAIR—Welcome, Mr Kuch.

Mr Kuch—We only heard about this by chance on the radio. My first point is that I do not know what sort of protocols the Senate has in terms of getting the information out to interested parties, but Aboriginal communities in North Queensland and Cape York are not well-resourced to go through papers to see advertisements. I do not know whether the North Queensland Land Council was directly informed that this was the case.

CHAIR—I think they were.

Mr Kuch—If that is the case, it is a problem within the land council there getting the information out to organisations.

CHAIR—There are so many different groups and networks.

Mr Kuch—That was my first point. Obviously, if you have informed the land council, it is incumbent upon the land council to inform the relevant organisations.

CHAIR—We were conscious of the whole Aboriginal and Islander involvement in this issue and of the difficulty of getting the story across. We keep trying to do better.

Mr Kuch—Okay. Firstly, with the expansion of commercialisation of wildlife species, the Aboriginal people believe—this is the Yarrabah community; I can only speak in my capacity in Yarrabah—in intellectual and cultural property rights, which also includes ownership of animals. They have totemic relationships with those animals. They have broad knowledge of animal habits and life cycles and so on. They possess a wealth of scientific information concerning those animals. If further species were looked at, in terms of commercialising native species, Aboriginal people in Yarrabah believe that they should have the first opportunity to be involved in that commercialisation.

Too often in the past we have seen, particularly with the crocodiles, that there are lots of players in the field and a lot of the Aboriginal communities have not really had a chance to get into the industry. I know Pompuraaw has, but if we are going to move down the path of commercialising wildlife species, Aboriginal people need to be resourced to be able to set up in that particular industry. There was a good program around some years ago, through the Bureau of Rural Resources, for Aboriginal people to do just that. I do not think that program exists any more. That is the first point I would like to make.

Secondly, four years ago, our company actually approached the Bureau of Rural

Resources concerning the breeding of cassowaries. They prepared a detailed submission with scientific evidence from leading experts in the field. The response was that it was impossible, that cassowaries would not breed in captivity. Three years later, we find the department of environment and heritage and the Wet Tropics Management Authority are doing exactly that.

On one hand, from the Bureau of Rural Resources, we are told to forget the whole thing, that it is an impossible thing to do. Three years down the track, we find a department of environment and the Wet Tropics Management Authority doing it. We find that rather astounding, that it was scientifically impossible and three years later it is not scientifically impossible. In fact, it is scientifically feasible. That particular submission that our company prepared was two-pronged. It involved restocking in the wild and, if possible, looking at cassowary meat, feathers, and so on, down the track.

Senator O'BRIEN—Is that documentation available?

Mr Kuch—I have certainly got a copy of our submission and the responses we got. We thought it was most unsatisfactory. This is what I am really driving at, I guess. Aboriginal people come up with these ideas and they are very motivated to actually do something not only for the welfare of the animal but also for any commercial aspects that may be available there.

CHAIR—And it gets pinched.

Mr Kuch—And it gets pinched.

Senator O'BRIEN—It is a different department that has done it to a different organisation. When you say it is pinched, there may not necessarily be a connection. It may be coincidental. You may have received the wrong advice or been given a view that was current at the time but not validly tested.

Mr Kuch—Yes. Nevertheless, I believe that was a fairly strong submission. He had relevant scientific evidence there. Maybe it was worth further investigation at the time in terms of a feasibility study or more scientific research, rather than getting the message that their experts consider it to be physically impossible when, in fact, the tribal group of this particular person, who was involved in looking at that cassowary project, brought up cassowaries in the camp when he was a kid. That was the practice if you caught any chicks.

CHAIR—So it can be done successfully.

Mr Kuch—It can be done, and he knew it could be done.

CHAIR—It is certainly possible to do it with emus, and that is a related species, is

it not?

Mr Kuch—That is right. The particular point was that male cassowaries are territorial birds and they do not take well to having other males anywhere in their vicinity. But it is actually going on at the moment. It is actually happening.

Senator O'BRIEN—Commercially, or just a scientific test?

Mr Kuch—I think it is to try and restock the Wet Tropics Management Area; but there may be commercial opportunities down the track if the native populations get up to more sustainable levels.

Senator O'BRIEN—I was going to ask a question relating to the utilisation of native animals. A view that has been put to me is that in many cases, accepting that there may be justification to recognise some prior right to use the species, or some social good arising from the use of the species by the Aboriginal community, the expertise does not necessarily exist, and the best way to facilitate development in this area is to encourage joint ventures. In other words, we should get groups with the expertise, technology or whatever to marry up with the communities, to provide jobs in the communities and profit incentive for the joint venturer.

Mr Kuch—If that joint venture is acceptable to the community and there are economic, cultural or scientific benefits in the proposal I am sure that our particular organisation would consider that sort of approach as being appropriate and look at it on its merits.

I think you will find, and this has come out in the dugong business that is going on up here at the moment, that the scientists at the cooperative rainforest research unit that is attached to James Cook University are saying the Aboriginal people hold 100 years or 200 years worth of our research right now. To find out what Aboriginal people know about dugongs would save us 200 years of scientific research.

Senator O'BRIEN—What about the capital side of things?

Mr Kuch—That is why I am saying that in the first instance Aboriginal people need to be supported to be able to develop those industries. You will find it is an area that the people love working in. I believe you have been to Cherbourg and have seen that. It is an appropriate cultural activity for the people. If there are employment and training benefits in it, that is exactly what communities want, particularly with the lack of an economic base that exists in most of the Aboriginal communities up here in north Queensland.

CHAIR—It probably just might help the committee to explain that most of the Aboriginal communities we are talking about are on the western cape or further north,

Yarrabah is really just east of Cairns.

Mr Kuch—That is right, 10 minutes by boat and 45 minutes by road, 16,000 hectares just over the ranges here to the south. It is a community of 2,500 people but there is very little economic base in the community. People in the communities want to break the dependency on welfare and so on. This is an industry where there is expertise in the community because people know these animals and their habits and so on. All it needs is a little bit of support or joint venture approach in order to realise their aims. It is something that has got vast promise, particularly with Yarrabah being very close to Cairns. Transport is not such a big problem as you would find if farms were 1,000 kilometres up on Cape York.

Another point I would like to make is that in Queensland, and it is probably the same all over Australia, the wildlife, the flora and fauna, are viewed as the property of the crown. Aboriginal people reject the view that the crown owns all wildlife and that there needs to be special provisions made so that they can take wildlife. They do not accept that view that the crown owns all of the wildlife and has the absolute right to decide what happens to the future of that particular species. They believe in prior ownership and would seek recognition for that.

Senator O'BRIEN—Without seeking to resolve that legal difference, you have an apparent legal reality at the moment that what you say is that the Commonwealth claims ownership and it is recognised by the courts. But, getting back to developing a business for the Yarrabah community, let's say in breeding cassowaries, have you looked at the Cherbourg model?

Mr Kuch—No, we have not been down to Cherbourg. That is a start, obviously, looking at what other projects are going. We have not had the opportunity or the funds to go down there and have a look at that closely.

Senator O'BRIEN—I am not sure what funds would be needed. I am fairly certain that there is an openness about what they have achieved. There certainly was with the committee because we were down there yesterday.

Mr Kuch—As I said, there was an excellent program through the Bureau of Rural Resources some four years back, but it was cut in the Keating years. It no longer exists. There was a program to encourage Aboriginal communities to investigate farming wildlife species, as well as commercial harvesting of feral species, but that avenue is no longer available to us.

The main point that our organisation would like to make is that, if there are going to be further opportunities in farming native species, we firmly believe that Aboriginal people should be given the first opportunity and also be given some support in order to develop that industry. There is room for other players but, given people's cultural links to

those particular wildlife species, they believe that it is an appropriate activity for their community, and that they have some prior right before other players jump into the market.

Senator O'BRIEN—Do you think the Aboriginal communities would accept codes of conduct which might be developed by industry?

Mr Kuch—I am sure they would. They are motivated by the welfare of the animals—if that is what you are driving at.

Senator O'BRIEN—Essentially, that is what they are about.

Mr Kuch—They are motivated by the welfare of the animal just as much as any other operator would be, and I am sure that they would have no problems accepting codes of conduct. In fact, I believe they would want to have some input in developing those codes of conduct as well.

Senator O'BRIEN—It is probably worth developing this, but it really is speculative at the moment. Are there any other native wildlife species, flora or fauna, that hold prospects that you believe should be developed by the Aboriginal community?

Mr Kuch—I believe there are, but if I start talking about them we never know where it will end up in a couple of years time. It has been mentioned numerous times that there could be some sort of farming prospects for one particular species of game bird up here, and that is the scrub turkey.

CHAIR—It is not bad tucker either.

Mr Kuch—I have not eaten it, but they assure me it is good tucker.

CHAIR—I did years ago.

Mr Kuch—Have any other Aboriginal organisations made any submissions to you up here in Cairns today?

Senator O'BRIEN—Yes.

Mr Kuch—The Cape York Land Council?

Senator O'BRIEN—No.

Mr Kuch—Is what I have been saying in line with their submissions?

Senator O'BRIEN—Basically, yes. The Edward River company made submissions which were specific to crocodile farming.

CHAIR—And Balkanu.

Mr Kuch—That is the Cape York Development Corporation.

CHAIR—Yes.

Mr Kuch—If the future of commercialisation of wildlife species also involves removing animals from the wild, there is a big concern in Aboriginal communities about that as well. Where do you get your breeding stock from? The crocodile industry is well established, but if other species were open to farming type ventures, then Aboriginal people in Yarrabah would certainly be saying that they would not want to see the breeding stock come from the wild.

Senator O'BRIEN—I commend to you the *Hansard* of the last two days of hearings, and if you make contact with the Cherbourg community about the ostrich farm, I think there is a wealth of information there for you to go on with. If you find from that reading that there are other matters which you want to put to us, I am sure the committee will look forward to any further written submissions.

Mr Kuch—That is exactly what I would like to say. We only got short notice. I have come here not really having had a chance to fully consider all the issues involved. If we could put in a written submission at a later date, we would be grateful for the opportunity.

Senator O'BRIEN—Yes.

Mr Kuch—Is there any particular time deadline for that?

Senator O'BRIEN—We have a reasonable deadline—February next year, I understand, is our reporting date—but the earlier, the better.

Mr Kuch—Thank you.

Subcommittee adjourned at 5.35 p.m.