News and Views

Removing the nail from the tropical forest's coffin

A comment by Mark Collins of the IUCN Conservation Monitoring Centre

Both *Oryx* (July 1983) and *New Scientist* (24 February 1983) recently reported that the largest firm of coffin-makers in Switzerland will no longer use the 'rare tropical hardwood, *abachi*' and is switching to local poplar instead. This move has drawn the attention of timber companies to the Tropical Forests and Primates Campaign—WWF/IUCN's multi-million dollar effort to conserve vital tracts of rain forest in 14 countries. It also highlights the fact that many of us unknowingly and unnecessarily use wild-grown tropical hardwood timbers for domestic purposes.

There are one or two further points about this tree that may be of interest. Firstly, *abachi* is a word with which English-speaking foresters do not seem to be familiar; in West Africa and Europe the tree is known as *obeche*. Its scientific name is *Triplochiton scleroxylon*, a large hardwood species in the family Sterculiaceae. In the lowland West African forests that are still standing it is not actually very rare, accounting for up to 13 per cent of the trees (Hall and Bada, 1979). In the 1950s and 1960s *obeche* formed 60 per cent of Nigeria's roundwood exports (Leakey *et al.*, 1982). An attractive timber, it is particularly valuable in plywood production because it has good peeling properties; it is also very light in weight—a useful feature for coffins!

It soon occurred to foresters that *obeche* would be a very valuable plantation tree, but early attempts at domestication were hampered because seeds were found to be short-lived, scarce, and frequently attacked by weevils or smut fungus. In 1971 the UK Overseas Development Administration recognised the problem and began a research programme with the Forestry Research Institute in Ibadan, Nigeria. Their aim was to develop techniques for conserving and improving indigenous West African hardwoods, particularly *obeche*. Later, a collaborative project concentrating on the physiological aspects of propagation was set up by Dr R.R.B. Leakey at the Institute of Terrestrial Ecology (ITE) at Penicuik, near Edinburgh (Leakey *et al.*, 1982). Between them, these projects have now succeeded in finding a method for the conservation and domestication of tropical trees, using *T. scleroxylon* as the model.

By vegetative propagation of stem cuttings, rather than growing from seed, the teams soon grew small trial plantations near Ibadan. These showed an enormous variation in the stem volumes of five-year-old trees (*c.* 12 m tall) and indicated that careful selection could double present timber yields. Also, the development of models that predict the growth form of a mature tree from an examination of its 3–6-month-old sapling has saved years of expensive field trials. Growth form is important because branching habit greatly influences timber yield. In the longer term more progress may result from controlled breeding between superior clones. Work at ITE has already indicated that generation time may be reduced from 20–30 years down to as little as two years (Leakey, 1983). Dr Leakey is currently seeking support to develop commercial plantations of *Triplochiton* using selected clones, and to extend his activities to the 14 key indigenous hardwoods of West Africa, including the threatened mahoganies (see *Oryx*, April 1983). Fifty-six species of tropical trees have now been propagated at ITE and mixed tree plantations are a real and practical possibility.

Despite these successes, investment in tropical plantation forestry is low, and there is no way in which the few existing or projected plantations can meet the world's needs for timber. In 1980 it was estimated that to satisfy just one-quarter of the demand, planting programmes would need to be increased by 300 per cent (Spears, 1980). The Swiss coffin-makers are undoubtedly correct in believing that the *obeche* they were using was wild-cut timber, and their initiative will certainly help to slow down the logging of the West African forests. But what a pity it is that the technology already at our fingertips is not being used to the full. The forests may be conserved, but trade reductions are economically damaging, and ailing economies are less able to support conservation programmes. Instead, a wide range of tropical trees should be domesticated using similar techniques to those already developed, to produce not only timber, but fruits, nuts, medicines, tannins and fodder both in the humid and arid

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zones of the tropics. Timber dealers, aid agencies, conservation organisations and governments in countries with tropical forests should do all they can to encourage and financially support tropical plantation forestry. In this way both conservation and development may be achieved. The natural forests will be maintained, tropical national economies supported, and we can have the pleasure of using tropical hardwoods for decoration, furniture . . . and even coffins!

References

Hall J.B. and Bada, S.O. 1979. The distribution and ecology of Obeche (*Triplochiton scleroxylon*). *Journal of Ecology* **67,** 543–564.

Leakey, R.R.B., Last, F.T. and Longman, K.A. 1982. Domestication of tropical trees: an approach securing future productivity and diversity in managed ecosystems. *Commonwealth Forestry Review* **61,** 33–42.

Leakey, R.R.B. 1983. *In litt.*, 12 September.

Spears, J.S. 1980. Can the wet tropical forest survive? *Commonwealth Forestry Review* **58,** 165–180.

Birds of prey saved from poachers in Japan

A report by Tom Milliken of the TRAFFIC office in Japan

It takes more than a steady supply of food to fledge a nest of northern goshawks *Accipiter gentilis* successfully in Japan. In fact it took a barricade, a series of trip wires, and 24-hour surveillance by more than 30 volunteers.

Pillaging birds of prey nests by organised teams of poachers has become rampant in recent years throughout Japan. A single young bird will bring up to US $650 on the local market, and certain unscrupulous pet dealers make a regular clandestine business. While it is illegal to hunt or take any bird of prey species from the wild, the poached birds are conveniently sold with import certificates which, under the Japanese system, are issued by the Japan Animal Dealers Union, a set-up that allows for widespread abuse.

In order to ferret out the illegally poached birds from legitimate trade, the Wild Bird Society of Japan (WBS) has been pushing the Wildlife Protection Division of the Environment Agency to instigate a numbered-leg-ring system for all bird of prey imports. Over several years a wealth of documented poaching and illegal trade evidence has been presented to the Government by the WBS. However, to date, the Environment Agency has only delivered vague promises to do something.

Goshawks at nest *(Wild Bird Society of Japan).*

This season in Tochigi Prefecture, one of Japan's richest bird of prey areas, Kakuju Iinuma of the local WBS branch decided to fight back. When a pair of goshawks chose a tall pine in a remnant forest bordering Nishinasuno Village to nest and two chicks were fledged, Iinuma vowed that poachers would not violate the integrity of the site. With locally collected funds a barricade of barbed wire was constructed around the tree, and a series of trip wires was set throughout the grove which when triggered would activate a siren at a specially built surveillance hut nearby. For 78 days at least two volunteers were present at all times and altogether 30 people were mobilised in the operation.

Despite this diligence, impudent poachers actually dared to cut the trip wires one night, but fled before penetrating the barbed wire barrier. On 26 June the chicks flew for the first time, and as if to reward the conservation efforts with a bonus there were *three* not two!

Iinuma's efforts eleswhere also produced results. One natural hole and three chiseled sites made by conservationists on the face of a sheer stone cliff play annual host to pairs of Eurasian kestrels *Falco tinnunculus*. Last year every fledgling was lost to poachers using ropes one fateful night. This year Iinuma's group built barricades at the head

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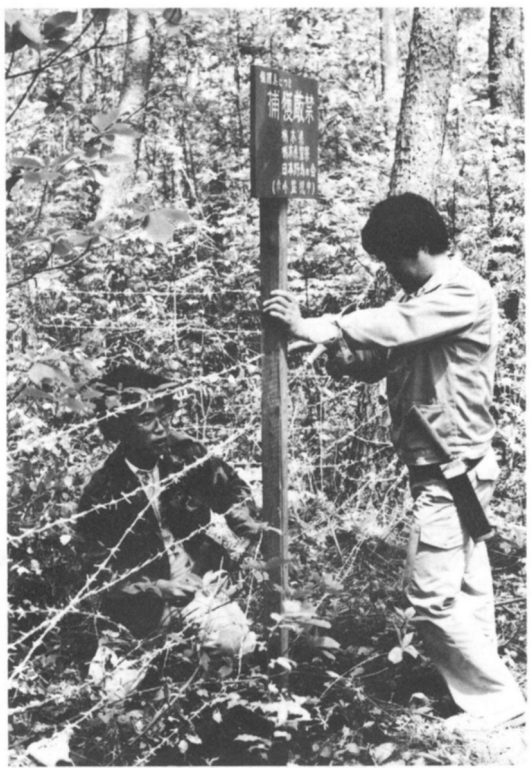

Building a barbed-wired barrier round the goshawks' nest tree *(Wild Bird Society of Japan).*

of the cliffs and set up a surveillance post at a local restaurant half a kilometre away. The poachers were defeated and 16 chicks were raised.

The efforts of Iinuma and his band have received national media coverage and have become a cause celèbre. However, reports from elsewhere indicate that this year's poaching was particularly severe. It is impossible to monitor every bird of prey nesting site. The real answer to the problem lies with Japan's Environment Agency and everyone is still waiting for some decisive action.

South African reserve to be a military target?

A deplorable proposal to expropriate a major part of De Hoop Provincial Nature Reserve, on the south Cape coast of South Africa, for military purposes is causing public uproar and much conservationist activity. A special issue of *African Wildlife* (**37,** 1) was devoted to the reserve, its special qualities, the richness of its wildlife, and the desperate need to save it. There are countless reasons to justify the latter.

The land to be used for missile testing abuts on to the main calving ground of South Africa's southern right whales. The reserve's *fynbos,* one of the world's most threatened vegetation types, is amongst the finest of the fragments left in the Cape. The bird population of its wetlands is sufficiently impressive to have caused South Africa to list it as a site of international importance under the Ramsar Convention. Five of the bird species—white pelican, greater flamingo, lesser flamingo, black stork and Caspian tern—are due to be listed in the revised *South African Red Data Book* for birds.

The Minister of Defence and Armscor (the quasi-government Armaments Corporation) have given the assurance that they are capable and equipped to look after conservation areas—but past experience shows that they are not. The activities described necessitate vast fire control measures and burning programmes which could spell the end of any reserve.

Public pressure has been so strong that the Government, in bowing to it, has agreed to an environmental impact study of the effect of Armscor's planned activities on De Hoop ecosystems so that they can be scaled down if deemed necessary. But, rather than an impact study on such an obviously vulnerable area, what is needed, and what would be more heartening to conservationists, is for the Government to climb down and select an alternative site.

Whaling: 1984—and beyond?

Ten years ago whalers were killing more than 50,000 whales annually. The 35th meeting of the International Whaling Commission (IWC) in July 1983 reduced the quotas of whales to be killed in the 1984 season to about 10,000. The imprecision is due to the uncertainty of how many whales of the remaining block quotas are taken as the last whalers phase out their operations. There is of course no guarantee that the whaling nations will abide by the decision to cease commercial whaling before 1 January 1986. However, Chile announced, just before the meeting began, that it had already implemented the moratorium on 14

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July, and Peru has withdrawn its objection, the only one of the four nations who objected to the 1982 decision to do so.

Japan, Norway and the USSR are the last three unrepentant whalers. Public opinion in Japan is against the country's objection to the ban and it is reported that the new Government may be less adamant than the last; in any case Japan settled for a small reduction in its minke whale quota in the Southern Hemisphere after first seeking an increase. The Director of Japan's Oceanic Fisheries Department is demanding that the US stops penalising Japan's fishing industry over the whaling issue and restores the 100,000 metric tonnes of fish allocation withheld in April. In retaliation to US sanctions Japan is threatening to stop buying fish from Alaska. The USSR accepted its reduced minke whale quota: Japan and the USSR between them lost 417 of their Southern Hemisphere minke whale quotas.

Norway's allocation of minke whales was cut from the previous year's 1690 to 635. Her request for a further 250 was almost passed by consensus, notwithstanding scientific advice to the contrary, but at the last moment Antigua, India and Oman, responding to intense conservationist lobbying, demanded a vote. This exposed those willing to compromise in private but not in public and Norway's request was denied although Europe, Japan and the USSR voted in favour of it. Norway must now weigh its residual whaling industry, which is worth about $1.5 million (£1 million), against the costs of defying the ban. The boycott of Norwegian fish by several US importers is costing Norway millions of dollars. Frionor, Norway's fish export co-operative, estimates its losses at $12–15 million (£8–10 million) and is pressing the Government to resolve the crisis, although its pleas are not supported by other Norwegian fish-processors and coastal fishermen/whalers. It is reported that Norway is soon to stop exporting whale meat to Japan and does not intend to file an objection to its quota of minke.

The decision that took the longest time to reach was for the bowhead quota. The US asked for, and was eventually granted, 43 bowheads to be taken over two years by Alaska's Eskimos, with a maximum of 27 struck in 1984 and with the second year's remaining 16 subject to scientific review. The US had the unenviable task of, on the one hand, taking a firm lead against commercial whaling but, on the other, having to plead for the Eskimos' subsistence (aboriginal) quota. Some nations are not so ready to accept the distinctions between commercial and subsistence whaling—at least in the context of whale conservation. At the beginning of the meeting Mexico made a firm stand for phasing out subsistence whaling, arguing that there is little difference between the two kinds because the phasing out of commercial whaling would also affect many people's livelihoods, and that since the bowhead was in danger of extinction there was no justification for allowing Eskimos to continue the hunt.

The USSR's grey whale quota of 179 is also classified as aboriginal but whether that description fits the practice was questioned when the conservation organisation Greenpeace raided a whaling village in Siberia where they claim grey whale meat is fed to mink. If this is true it is, of course, a flagrant violation of IWC regulations which require all aboriginal whaling to be solely for the subsistence of native peoples. But, returning to the bowhead, probably even more dangerous for that species than the continued take by Eskimos, is the threat from proposed offshore oil and gas development. The US Department of the Interior has already sold three leases in Alaska and seven more are planned in the next five years. These leases, combined with developments in the Canadian Beaufort Sea, encompass virtually the entire range of the bowhead. The Interior Department estimates that a serious blowout could exterminate half the population: the scientific committee of the IWC estimates the total to be only 3800.

The next meeting of the IWC, to be held in Argentina in June 1984, will perhaps reveal how the IWC intends to change, as it surely must if it is to survive into the post-whaling era. There are still thorny issues to address, such as small cetaceans, which are still outside IWC regulations, and the problem of 200-mile zones. Presumably, too, aboriginal whaling will continue to be a topic for dissent. But conservationists hope that the IWC will switch from presiding over the killing of whales to overseeing benign research on and the non-consumptive uses of whales. The first world conference on the benign uses of whales, 'Whales

Alive', held in Boston, USA, earlier in the year, drew up recommendations for a new role for the IWC and they were presented at the 1983 IWC meeting. We shall have to wait and see whether the IWC can rise to a new challenge.

Fea's muntjac discovered for the first time in China

During the period February 1982–spring 1983, three male and three female Fea's muntjac *Muntiacus feae* were collected in the valley of Dongjiu river of Nyingchi county and at the gorge of the Yigang river of Bome county in Xizang (Tibet) Autonomous Region, in the remote south-western part of China which lies between 29–30°N and 94–96°E. To our knowledge they have not been found in China or collected elsewhere in the present century and their known range was limited to northern Tenasserim in peninsular Burma.

The body size and morphological features of the specimens resemble those of the Indian muntjac *M. muntjak* and the black muntjac *M. crinifrons*. The head and crown hair is short, which is similar to the Indian muntjac, and distinctly different from the black muntjac by the lack of a coronal tuft. The centre of the crown, the region around the base of the ears and pedicles are a bright brown colour, with a 20-mm-wide stripe running 80 mm up the inner side of each pedicle, which helps to distinguish it from the other muntjac species. The dorsal surface of the tail is black and the sides and underside white, which is similar to that of the black muntjac. The frontal glands and the supraorbital glands are prominent.

The Fea's muntjac was found to be essentially solitary, and its habitat is in mountainous forest of a mixture of coniferous, broad-leaf forest or shrub forest at an altitude of 2500 m above sea-level.

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The *IUCN Mammal Red Data Book* (1972) lists this species as endangered and being confined to mountainous forests in south Burma and neighbouring areas of west Thailand, although there is no recent information from Burma. The species is valued as food and armed Burmese insurgents were reported as living off the land in the species's range. There are no known captive specimens and the *RDB* recommends establishing a captive-breeding group as well as conducting ecological surveys to determine the status of the species in areas where the political situation is sufficiently stable to permit it.

Editor

A subantarctic island group in need of legal protection

Since island ecosystems are so vulnerable to disturbance, as evidenced by the destruction of so many across the world, it is disturbing to know that, of the few that have not been drastically modified by man, some are virtually unprotected. The subantarctic island group of Heard Island and the McDonald Islands in the Southern Ocean, which is Australian Sovereign Territory, falls into this category and is the subject of a study by P.L. Keage,* who makes a plea for its legal protection.

Heard Island was the scene of uncontrolled seal, and later penguin, slaughter for pelts, meat and oil between 1855 and 1929. The seals were brought to such low numbers that an assessment of stocks in the 1930s by a sealing company led them to discard their interest in renewing sealing there. The seal populations escaped total destruction perhaps because the rugged terrain and harsh weather of Heard Island made some beaches inaccessible in some seasons. The most heavily exploited species, Kerguelen fur seal *Arctocephalus tropicalis gazella*, southern elephant seal *Mirounga leonina*, leopard seal *Hydrurga leptonyx*, and king penguin *Aptenodytes patagonicus*, are now repopulating Heard Island in increasing numbers. The seals and penguins of the McDonald Islands were not subject to exploitation because of the Islands' inaccessibility—the first recorded landing, by helicopter, was in 1971—and its fur seal population has been important for the recolonisation of Heard Island.

Despite the occupation of Heard Island by, first,

*Keage, P.L. 1982. The conservation status of Heard Island and the McDonald Islands. *University of Tasmania Environmental Studies Occasional Paper 13.*

successive teams of sealers and, later, by scientists at the research station set up in 1947 and occupied until 1954, the island group is the only subantarctic landmass free from introduced plants or animals. The Islands' value and need for special protection has been recognised internationally, by UNESCO's Man and the Biosphere and IUCN's Islands for Science programmes, yet there is no specific legislation relating to them. Australian legislation that may be considered to apply to the Islands does not afford any legal protection to any species that occur there since the definition of wildlife excludes those species indigenous to the Islands. At present anyone could, without fear of legal penalty, take or harrass animal life, import or export any animal (provided that the purpose is not for sale or trade), and introduce exotic plants or destroy the native vegetation. So far the Islands have escaped development largely because of their remoteness, inaccessibility and unsuitability for permanent settlement but attention is becoming focussed more and more on this part of the world.

P.L. Keage discusses three alternative courses of action which the Australian government could take to give the islands the conservation status they deserve: to draft a new nature conservation ordinance specific to the Islands; to proclaim the Islands a national park; or to bring them under the Australian Antarctic Treaty (Environmental Protection) Act 1980. Of these, the author believes the third to be the simplest and most appropriate; it would require only a simple amendment to maintain an ecosystem which is intimately related to the Antarctic and similarly vulnerable.

It is a timely study. The submarine plateau from which the Islands rise is potentially rich in hydrocarbon and mineral resources. The minerals regime now being drafted, in the utmost secrecy, by the Consultative Parties to the Antarctic Treaty brings ever closer the most environmentally dangerous form of exploitation.

Rare gazelles in North Africa

The Society for the Protection of Animals in North Africa (SPANA) made recent enquiries through its regional representative, El Haj Abderrahman Lejri, concerning the status of gazelles in Tunisia.

Gazella dorcas, photographed at Orbata Zoo by J.A. Burton in 1973, when the herd numbered about 20 individuals.

The enquiry was initiated by the ffPS, since in 1973 John Burton visited southern Tunisia where signs of gazelles, as well as a few captive animals, were seen. The SPANA report states that gazelles are on the brink of extinction in Tunisia but can still be found in limited numbers in certain parts of southern Tunisia, notably Nefta, Chott Nefzaona, des Ouléd Mansour, Maknassy, Chbika, Douze and Kasserine. There is an official ban on hunting, and the SPANA representative believes that without this protection they would not survive.

In addition, captive gazelles exist at Tozeur and Gafsa. The Orbata Zoological Park at Gafsa houses a herd of about 180 which range over a natural pasture of 250 acres; their food supply is supplemented with hay and lucerne when necessary. There are three species of gazelle found in Tunisia: *Gazella cuvieri*, *G. leptoceros* and *G. dorcas*. In addition to gazelles, the Orbata Zoo has a breeding group of 22 ostriches.

Mooring at Snares Islands, New Zealand—a case of reluctant compromise

When the New Zealand National Parks and Reserves Authority reluctantly issued a permit to two lobster fishermen for the period 23 July 1982–23 February 1983 to moor in Hoho Bay,

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Snares Islands if bad weather forced them to seek shelter, it met the strong disapproval of conservationists. Landing on the Snares Islands had been prohibited since 1961, when they were designated as a nature reserve. They are internationally acclaimed also, belonging to that rare group of subantarctic islands which are still rodent-free. The landing of just one pregnant rat would spell disaster for the islands' ecosystem, its birds in particular. Vast numbers of seabirds breed there, and there are four endemic species, the Snares black tit, fernbird, snipe and crested penguin. Rats, which are known to enter the water from boats and can swim distances of up to one km, would have further opportunities to invade on the ropes attaching a moored boat to shore.

One can understand the concern of conservationists but more demanding of explanation is the decision, albeit a reluctant one, of the Park and Reserves Authority. In the June 1983 issue of its newsletter the Authority justifies its stance by saying that in considering the permit application it saw its paramount objective as being to increase the security of Snares Islands against rodents. It argues that, although denying the permit would have exonerated the Authority if rats from fishing boats were ever to become established it would not necessarily guard against this happening. Denial would not prevent rats landing from shipwrecked boats, emergency moorings in storms, illegal moorings in darkness (which are already known to occur), deliberate release of rats and rats swimming ashore from vessels further out to sea. Denial also might incur ill-will among fishermen whose co-operation is essential for protecting the islands under the present system, where they are part of the Southern Controlled Rock Lobster Fishery for which over 300 boats are currently licensed. Discussions have since confirmed that if permits were not issued fishermen would still moor illegally if necessary to protect themselves against bad weather. Moorings by permit are at least accompanied by required safeguards including baited rodent traps on the boats.

The controversy that has grown up around the permit issue has opened up a much needed debate. It is impossible to guard against accidental shipwrecks and it would only be possible to prevent illegal moorings by constant surveillance and by prosecuting the offenders and increasing the penalties. The Government has now declared its intention to designate Snares Islands as a national reserve and a draft management plan has been circulated with discussion papers on 'Rodent quarantine on island reserves' and 'Rock lobster fishing around Snares Islands'. It is perhaps unrealistic to be an uncompromising conservationist, to take, in this particular case, the stand that Snares Islands should remain absolutely inviolate and that the risk of rats landing should be guarded against, to the extent of prohibiting lobster fishing within 10 km of Snares Islands. But one of the problems of beginning to compromise is deciding when to stop giving way. And perhaps finding, when one does stop, that there is nothing left to compromise over.

Mollusc conservation

A report by Susan Wells of the IUCN Conservation Monitoring Centre.

The 8th International Malacological Congress was held in Budapest from 28 August to 4 September 1983 and was notable for the marked interest and concern that was shown for conservation issues. Papers covered a diverse range of scientific subjects but references were made to the potential long-term effects of acid rain on molluscs, the vulnerability of many of the Pacific island land snails and the decline of some of the wetland species in Europe. The atmosphere was therefore highly suitable for the inaugural meeting of the new IUCN/SSC Mollusc Specialist Group, which was held as an open meeting in order to generate further interest, provoke discussion and generate ideas for future projects. It rapidly became clear that action for island land snail faunas would be a high priority for the new group. There was general agreement that it was time for the malacological community itself to demonstrate the need for mollusc conservation and to initiate positive action. The two resolutions passed during the closing session of the Congress, both on conservation issues, provided final confirmation of this. The next international malacological congress will be held in Edinburgh in 1986 and will include a full session on mollusc conservation issues.

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