Action Plans

Since the last SSC News in *Oryx* (October 1991), four new Action Plans have appeared. One, on swallowtail butterflies, is the first to deal with an invertebrate group. The *Crocodile Action Plan* focuses on some extremely threatened species as well as providing guidelines for the management of economically important and more widespread species. The *Action Plan for South American Camelids* is the first to be published in both English and Spanish and the *Lemur Action Plan* contains very detailed recommendations, made possible because of the focus on a single country. Many others are nearing completion, including the Action Plan for Old World Fruit Bats, compiled by FFPS staff member Simon Mickleburgh, and Tony Hutson and Paul Racey, joint chairmen of the Chiroptera Specialist Group.

New newsletters

March saw issue No. 1 of *Froglog, Newsletter of the IUCN/SSC Declining Amphibian Populations Task Force*. With staff and facilities at the Environmental Research Laboratories, Corvallis, Oregon, USA, the aims of this group are to organize a global programme to determine the status of amphibian populations, assess the implications of any declines, study potential causal factors and make appropriate policy recommendations. Working groups and monitoring programmes are being set up all over the world and the newsletter reports on those in Canada, UK, Australia and the US. There is also news of declines in Estonia, Australia and Venezuela. While some declines are attributable to obvious causes, such as widespread habitat destruction, the causes of others remain mysterious. In any one region some species appear to be declining while others appear to be unaffected. There is much work to be done before any conclusions can be drawn: even where there are apparent declines the scarcity of long-term data makes it impossible to tell if low numbers are simply indications of natural fluctuations.

The new African Reptile and Amphibian Specialist Group brought out its first newsletter in April. It carried a report by Chris Gordon about the importance for wildlife of sacred groves in Ghana. There are at least 2000 of these, ranging in size from hundreds of hectares to a single tree or some stones. The reasons for their establishment are many and procedures governing their use are site specific and some are very strict. Some may not be entered at all, others only on certain days and, where entry is allowed, controls are placed on the use of the grove's resources.

Many small villages in Ghana have occupied the same sites for hundreds of years and sacred groves associated with them are typically islands of relict vegetation surrounded by farms and settlements. A number of sacred groves contain streams and pools, and are important for herpetofauna; others have significance to local people because of a certain species – for example, bushbuck for the Efutu people of Winnea or colobus monkey for the Brong people. But traditions protecting sacred groves are breaking down, partly due to the conversion of local people to Christianity or Islam and partly due to development pressures. The article urges that sacred groves are mapped and demarcated and that surveys are done to assess their biodiversity. Work has started but a lack of resources makes progress slow. Gordon argues that the traditional custodians should be given a formal legal role as keepers of the groves.

Another article points out that at least two species of herpetofauna have become extinct in recent times in Africa. *Arthroleptides dutoiti*, a frog from the Koitobos River on Mt Elgon, Kenya, was described in 1935 and, despite recent searches, has not been found again. A small serpentiform lizard, Eastwood's long-tailed seps *Tetradactylus eastwoodae*, known only from two specimens from Transvaal, has not been collected again in the last 50 years. Both losses may be due to habitat destruction: in the case of the latter, pine plantations and frequent fires may be important factors.

There are also reports on illegal tortoise exports from Tanzania and the problems of what to do with tortoises seized by Customs. Returning them to the wild may simply result

in them being recaptured and re-exported. Particularly worrying are the exports of pancake tortoises *Malacochersus torniere*, which occur only in Tanzania and Kenya, and about which virtually nothing is known. There is also a report of the case of three Aldabra giant tortoises *Aldabrachelys elephantina* being stolen from an introduced population on Changuu Island and smuggled to Dar es Salaam. Five Aldabra tortoises were also taken from the grounds of Zanzibar's National Museum, but have not been traced. Tanzania has recently increased its reptile exports and presumably these animals could have been smuggled out, perhaps deliberately mislabelled. Tanzania has problems enforcing the law – after seizure the animals must be held and cared for until legal formalities are concluded.

A new project to help marine turtles that nest on Kenya's beaches has been started by the Kenya Wildlife Service in co-operation with Baobab Farm. A preliminary survey of turtles has been carried out and local fishermen have been encouraged to report nesting turtles. The contents of four insecure nests found near Mombasa have been transferred to Baobab farm for hatching, rearing and subsequent release (headstarting). The editor of the newsletter (Kim Howell) adds a word of warning, saying that, because there has never been a proven return of an adult headstarted turtle to its natal beach, headstarting should never be used as a complete substitute for natural nest emergence of hatchlings.

Another new newsletter appeared in February published by the ICBP/WPA Specialist Group on Partridges, Quails and Francolin. The group is concerned with about 140 species, including snowcocks and guineafowl. One – the white breasted guineafowl *Agelastes meleagrides* – is critically endangered. Endemic to the Upper Guinea forest block of West Africa, half the world's population is believed to live in Täi National Park in Côte d'Ivoire. The newsletter also reports sightings of the orange-necked partridge *Arborophula davidi* in June 1991 in the Nam Bai Cat Tien National Park in southern Vietnam. It was the first time that it had been recorded since its initial collection in 1927.

Carnivores, crocodiles and manatees

Small Carnivore Conservation, the Newsletter and Journal of the IUCN/SSC Mustelid, Viverrid and Procyonid Specialist Group (No. 6, April 1992), reports on a conservation and restoration project for the critically endangered Owston's palm civet *Chrotogale owstoni*. Its distribution is confined to a very small area of northern Vietnam, northern Laos, southern Yunnan and southern Guangxi in China. Habitat loss and disturbance and intense hunting pressure during the last few decades have eliminated much of their former range and critically reduced numbers.

A proposed law in the Netherlands will completely forbid the hunting of the polecat *Mustela putorius* and stoat *Mustela erminea* because numbers are declining. It had been legal to hunt these animals from mid-August to mid-February and from mid-October to mid-February, respectively.

The *Crocodile Specialist Group Newsletter* (January–March 1992) published a report of the successful captive-breeding of Chinese alligators *Alligator sinensis*. Ten years ago prospects for the species were poor and the FFPS helped fund a study to recommend conservation measures (see *Oryx*, **17**, 176–181). The Anhui Research Centre of Chinese Alligator Reproduction is now a first-class establishment capable of producing thousands of alligators each year. In 1981–82 the farm received 212 wild-caught animals, of which about 170 still survive. Hatchlings have been produced since 1982 and F2 hatchlings since 1988. Currently 4197 captive-bred offspring survive. Another smaller breeding operation in Zhjiang province, which is run by villagers, started in 1984 with four wild-caught alligators; today there are 118 progeny. In addition to the captive population wild alligators have increased in numbers in the wild. The Anhui research centre is surrounded by a 907-sq-km Natural Chinese Alligator Conservation Reserve and, while the land has multiple land uses, it includes a mosaic of 26 protected areas where about 800 wild alligators live, some populations numbering more than 100 individuals. Another 100 live outside the reserve

in isolated patches in Anhui Province. There may also be remnant populations in the wild in Zhejiang and Jiangxi provinces.

The decline of the Chinese alligator appears to be have been well and truly reversed. The next stage might be more difficult. The major impediment now is that Chinese farmers dislike alligators, perceiving them as disruptive. The Chinese Government is proposing to maintain a stock of 4000 alligators at the Anhui Research Station and to generate funds for alligator conservation by commercial trade from the farm. Live animals could be supplied to zoos and the pet trade, while there is a local market for meat in the tourist hotels. Added to that the Chinese alligator itself is a great tourist attraction.

Sirennews (No. 17, April 1992) gave some good news about Florida's manatee population. A survey on 17–18 January yielded a recorded 1856 individuals, compared with two surveys in 1991, which counted 1268 and 1470 manatees. The higher count in 1992 can be attributed to ideal survey conditions rather than a real increase, but the figure is as high as the most optimistic researchers would have guessed 3–4 years ago and a population of that size could be expected to sustain better the number of mortalities recorded. More manatees died from human-related causes (68) in 1992 than ever before.

Helene Marsh draws attention to the fact that surveys for manatees and dugongs cannot provide reliable data on which to judge population trends. Most aerial surveys for sirenians still use techniques developed in the 1970s, counting animals from aircraft flying at fixed height and parallel to the shore. If a large group is detected a count is made while the aircraft circles. No corrections are made for animals not seen and it is assumed that sirenians occur mostly close to the shore, although some studies fly additional transects over areas where suitable habitat extends offshore. While this method is useful for identifying major areas of inshore sirenian habitat, it is of limited use in large bays and areas with a broad continental shelf. It is also unsuitable for tracking changes in abundance because the number of animals sighted is dependent on their distribution relative to the shore, which can be very variable.

The fixed-width survey technique was developed for use at large spatial scales and has been successfully used for dugongs in Australia and the Arabian region. It incorporates methods for estimating perception bias (animals that are visible but missed) and standardizing for availability bias (animals that are not seen due to water turbidity). It provides a repeatable standardized minimum population estimate and is useful for monitoring trends in abundance over large spatial scales and long time periods. But the population estimates have a precision of 12 per cent at best, which means that it would take at least a decade to detect a low-level chronic decline in abundance and even longer for smaller populations or in smaller areas. Simulations have shown that for populations in the low hundreds, the most likely outcome of any series of surveys will be a non-significant trend even when the population is declining.

Marsh concludes that it is impossible to detect trends in most sirenian populations and that in most areas a demographic approach would be more productive. First, a method of obtaining accurate estimates of sirenian abundance is needed and the biggest obstacle is the lack of a method compensating for the variable proportion of animals that are invisible because of water turbidity. She suggests putting a great deal of effort into obtaining data that would allow biologists to model diving and surfacing behaviour of dugongs and manatees under a range of conditions and using the results to calculate a correction for available bias. In that way it would be possible to obtain more accurate population estimates and to detect changes that required conservation action.

IUCN'S new logo and address

IUCN
The World Conservation Union

IUCN's new logo was adopted in May for use from August, when IUCN moved to its new headquarters at Rue de Mauverney 28, CH–1196 Gland, Switzerland.