

## Editorial, News and Views

The *Cetacean Specialist Group* have announced that they will publish an action plan for 1988 to 1999, copies of which may be available early in 1988 by those interested writing to the Chairman—Dr William F. Perrin. Dolphin kills, as a result of tuna fishery, are rocketing in number. The Inter-American Tropical Tuna Commission estimated that between 125–129 000 dolphins died in the international purse fishery in the Eastern Tropical Pacific in 1986. The estimates for 1985 were 55 000 and for 1984 between 34–39 000. It was noted that as the average size of tuna catch has almost doubled, the dolphin mortality always increases with the amount of tuna in the net, as it does when such hauls are taken after dark. Concern was expressed that the kill of the Eastern spinner dolphins was three times the level of 1984. It has been formally classified as depleted for several years, and the population has been estimated to have declined as much as 80% since purse seining began in the sixties. Another cause for concern is the large kill of common dolphins—up to 26 000—and unfortunately there seems little hope for a solution of the dolphin/tuna problem.

Concern is also expressed that the Chilean dolphin (*Cephalorhynchus eutropia*), Burmeister's porpoise (*Phocoena spinipinnis*), and two *Lagenorhynchus* spp. are being taken and their meat used as crab bait in Chile. In the opinion of a W.W.F. team, the number of animals in the Western passages of the Strait of Magellan, the Patagonian and Fuegian passages are currently exhibiting a strong reduction. Commerson's dolphins (*Cephalorhynchus commersonii*) in the central Strait of Magellan may also have been greatly reduced by the crab industry between 1976–1980. In another area of the world, concern is still expressed over the Turkish Government fishery for common dolphins and harbour porpoises in the Black Sea, but very little information is available.

The newsletter of the *Cetacean Specialist Group*, published in May 1987 reports on the workshop on River dolphins held in China. Five platanistoid species were reviewed under the chairmanship of William F. Perrin. The major conclusions are summarized as follows:—

1. *Inia geoffrensis*: this species should be classified as vulnerable in the I.U.C.N. Red Data Book, and although fishing does not cause a high level of by-catch, efforts should be made to survey the population.
2. *Pontoporia blainvillei*: recommended to be provisionally classified as vulnerable since large numbers had been killed in gillnet fisheries over the last 30 years in Argentina, Uruguay and Brazil.
3. *Platanista gangetica*: should be classified as vulnerable, and a survey should be set up since rough estimates appear to limit the animals to the mid thousand, and it has disappeared in some regions in very recent years.
4. *Platanista minor*: to be classified as endangered, and fully protected in the Indus Dolphin Reserve in the Sind where the population has increased to about 400 individuals.
5. *Lipotes vexillifer*: the most endangered cetacean. Current estimates put the population at about 300. Full funding is required to enable the dolphins to be translocated from the more dangerous parts of the river to new reserves.

The latest *I.A.A.M. News* quotes, from the Journal of the Shedd Aquarium, 'Aquaticus', our old colleague Professor Neylan Vedros' comments on cetaceans in captivity. He points out that there are no solid scientific data to determine whether animals in captivity have a shorter lifespan than those in the wild, that the alternative facilities to observe animals in their natural habitat rather than captivity would be economically impractical, and possibly limited to a few wealthy coastal cities. He quite categorically says that it is important to understand the host parasite relationships in these animals, and that to study such a question can only be carried out with animals in captivity. He points out, and emphasizes, that it is critical that we understand as much of the basic biology of cetaceans as possible, quoting as an example the recent epizootic of leptospirosis in Californian sealions. This underlines the fact that marine mammals are in a delicate balance of nature. The mild interstitial nephritis found in that case would only have caused a medical problem in domestic animals whereas it was life-threatening in marine mammals. He emphasizes that no-one should condone poorly managed captive animals, and that it is not too late to investigate the problems, and not leave diseases as nature's way of regulating populations.

*African Wildlife*: 6 reports that the Southern white whale in South Africa is increasing at about 7% per year. In 1986, there were 309 animals observed, including 51 calves along the South African coast. *New Scientist* of the 11 June 1987 comments on the brand new indoor exhibit for dolphins at Brookfield Zoo, Chicago costing \$12 000 000 to construct. The pool holds 3 000 000 litres and is up to 6 metres deep. Therefore, it matches the draft standards listed in the Klinowska report. The old indoor exhibit at Brookfield named the 'Seven Seas

Exhibit' was opened in 1961, and was only one fifth of the size of the new exhibit which seats twice as many visitors. The main pool contains four inter-connected pools and there are two other pools for the five dolphins, plus a smaller pool for treating sick animals.

The *New Scientist* of 12 February 1987 publishes an interesting article by Margaret Klinowska based on information that members of E.A.A.M. have received earlier on the live stranding of animals due to errors of navigation. Her paper was published in 'Aquatic Mammals', Volume 11, No. 1, 27-32. The Editor has a copy of Lev M. Mukhametov's paper on 'Unihemispheric Slow Wave Sleep in the Brains of Dolphins and Seals', pointing out that it has been demonstrated in both bottlenose dolphin, porpoise and northern fur-seal, but was not found in Caspian and harp seal. Intermediate E.E.G. synchronization in dolphins can be both bilateral and unilateral, and is not only a cortical but also a thalamic phenomenon in dolphins. He failed to find any correlations between unihemispheric sleep and behaviour in dolphins, which in any of its behavioural states exhibits active fin movements. Paradoxical sleep is absent in dolphins, and bilateral delta waves are incompatible with autonomous respiration. It is suggested that dolphins need unihemispheric sleep to maintain the motor activity which is necessary for normal autonomous respiration.

Two numbers of *Marine Mammal Science* have been published since our last issue. Volume 3, No. 2 contains articles on 'Revision of the spotted dolphins, *Stenella* species', 'Correct and incorrect use of recruitment rates for marine mammals', 'Size-class segregation of bowhead whales discerned through aerial stereophotogrammetry', 'Corneal surface properties of two marine mammal species', these being Zalophus and Tursiops. Volume 3, No. 3 contains articles on weaning elephant seal pups, thermoregulatory adaptations in marine mammals, using organochlorine pollutants to discriminate marine mammal populations, atypical pup rearing strategies by sea otters, a report on an implanted transponder chip used as a tag for sea otters, some observations on the prey stunning hypothesis (this latter, of course, related to reports of *Tursiops truncatus* killing prey by sound), the attainment of sexual maturity of two female Humpback whales, whale heads and ray diagrams, and two letters on people communicating with dolphins, together with the usual interesting review of recent books.

Francisco J. Avella from Majorca has prepared a document on the Mediterranean Monk seal for the meeting held under the auspices of the Directorate of the Environment, Consumer Protection and Nuclear Safety of the Commission of the European Communities. This meeting took place in October 1986, and for any-one interested in the conservation of the species is a very worthwhile summary of the present situation. It refers to preventative measures to prevent further destruction of the animals, together with comments on the practical possibilities of releasing captive born and reared animals. Copies have been circulated to the Marine Mammal Commission in the U.S.A., and the National Marine Fisheries Service, W.W.F., and I.U.C.N. in Switzerland, and representatives from Spain, the Netherlands, Italy, Greece, Great Britain, France, Federal Republic of Germany, Canada, Belgium, and the European Parliament, E.E.C. Council of Europe and U.N.E.P.

Reports from *Oryx*, Volume 21 in July 1987 note that Nova Scotian fishermen demand a grey seal cull. The present method of offering a bounty for jaws of shot animals is felt, by them, to offer insufficient control. It was interesting to see in the Japanese publication 'Animals and Zoos', No. 6 of 1987 that twin American manatee have been born at the Okinawa Ocean Expo Memorial Park Aquarium.

The Sixteenth Annual Symposium of the E.A.A.M. will be held around the weekend of 12-13 March 1988, and for the second time in its history in England. This year, the conference will be based at Windsor, and full details may be obtained from Michael Riddell, Marineland, Avenue Mozart, 06600 Antibes, France.