Colleagues Sylvestre and Digard, from the Societe d'Etudes des Cetaces et Tourisme de Tadoussac have published a scientific report on the lesser Rorqual (*Balaenoptera acutorostrata*), which is available from them at 4 Allee de la Foret, 92360 Meudon la Foret, France for 160 French francs to those in the Common Market, and for 175 French francs to those outside, for despatch by boat, or 250 French francs for airmail.

Sea World, Queensland, Australia issue their visitors with an explanatory leaflet, reproduced here, on the position regarding the exhibition of cetacea in captivity. Other organisations might like to issue similar information to their visitors:-

The Case for the Exhibition of Dolphins and Whales

There is a move by Greenpeace activists to close down every Marine Zoological Park in the world, claiming that the mammals in the parks are mistreated, and that there is no need to exhibit mammals in order to ensure their survival. The weight of legitimate scientific opinion is strongly opposed to that view. Throughout the world, there are only 500 or so dolphins and whales exhibited in marine parks. As an animal species, they are the most pampered and cared for group on earth. High technology has been developed in the major parks, such as Sea World on the Gold Coast, ensuring an animal husbandry programme of the highest order. The world is full of animal cruelty. Tens of thousands of domestic pets are senselessly tortured and killed every year in Australia. Thousands of dolphins are killed annually in Japan by fishermen who claim that the mammals are in competition for their food supply. There would appear to be so many other deserving causes for Greenpeace, but they have chosen to attack the marine parks of the world because such attacks will gain them the most publicity. Considering the pressures on our world, it is not valid to follow their idealistic view.

Learning to Care

As man enters his planet's last ecological preserve, the ocean, it is imperative to his own survival that he learns to understand, manage and conserve its precious resources. Sea World and other marine parks in Australia contribute substantially to the collection of scientific information and research on mammal biology, behaviour, communication and intelligence. Sea World often provided life-giving

assistance at stranding sites and in the transport and care of stranded animals. Professor Kenneth Norris, Professor of Natural History at the University of California, and one of the founders of the Society of Marine Mammology, the world body of scientific authority, says 'I disagree with the contention that closing exhibits will assist the conservation efforts for marine mammals. History teaches exactly the opposite. People care about things they know, things that lie close to the emotional heart. A trip to a marine park is a safari for the rank and file of society, and has done perhaps more than anything else to keep public awareness high. The memory of people is distressingly short. There needs to be constant reeducation. What counts is the emotional touching of a person and an animal. A visitor watching a dolphin respond to a trainer, or a little boy who seeks to pet it, is where the public caring begins. We must continue to learn, to educate, and to share new understandings about the lives of dolphins with the public if we really want to protect them.' Sea World has an envied reputation for the keeping and raising of dolphins. It wants to keep doing this for the reasons that Professor Norris outlines.'

On the other hand, the **Sea Shepherd Society of Virginia**, USA distribute in 'The Animals Agenda' information and comments such as:-

Australia Urges Freedom for Whales and Dolphins

Earlier this year, the Australian Senate Committee on Animal Welfare, a non-partisan legislative committee inquiring into the use and abuse of animals in Australia, recommended that no additional facilities for keeping captive whales or dolphins be permitted in that country. In its report, the Committee also recommended that no more permits for the capture of cetaceans in Australian waters be issued, and that a ban on the importation of cetaceans from overseas be implemented. The extraordinary report was the second issued by the Committee during the second year of its two-year investigation of the status of animals in Australia. The first reported on country's massive export of live sheep to the Middle East (Although the Committee called the export business inhumane, it failed to recommend a ban because of the huge economic interests involved. It did, however, recommend a long-term solution to the cruel trade: the export of refrigerated meat instead of live animals). The recommendations on the problem of

captive whales and dolphins, however, left little else to be desired by animal advocates-with one exception: the Committee failed to recommend that existing oceanaria (marine parks) be closed down unconditionally. Instead, it recommended that existing oceanaria be closed down only if they fail to meet strict standards for the welfare of their animals. These standards should include a more natural environment and a policy that only natural forms of behaviour be displayed. A facility would also have to prove that it is making an important contribution to research and education. As with the recommendations on the live sheep export, none of the recommendations concerning whales and dolphins can be implemented until they are considered by Parliament.

Initially, there was some trepidation about the report's contents. The state of Victoria had been considering plans for a new marine park with captive dolphins in Melbourne. The proposal aroused heated protest, and the government announced that it would defer its decision until the Senate Committee had issued its report. The promoters of marine parks waged a long campaign-including flying in a scientist from overseas—to convince the committee that dolphins and whales thrive in small concrete tanks, and that marine parks make an important contribution to the conservation of the species. But the Committee was not fooled. It concluded that whales and dolphins in captivity suffer from stress, behavioural abnormalities, high mortality rates and breeding problems, and said that oceanaria have not made a substantial contribution to cetacean conservation and preservation. 'Cetacea generally have paid a high price for the dubious advantages of captivity,' the Committee's report said. Future Committee reports will deal with the kangaroo slaughter, animal experimentation and factory farming."

Why Jail Whales?

In July 1985, two young beluga whales were swimming free in Northern Canada. The National Aquarium of Baltimore, after a lengthy chase, captured them. One was wounded during capture, one later during force-feeding. Destined to spend their whole lives within the dolphin section of the aquarium, the three-year old animals will probably live less than five years more, although they would live as many as 50 years in the open ocean. This will not be the first marine mammals to suffer at the Aquarium. All three sea lions obtained by the facility have died prematurely: Bacall lasted 2.5 years; Bogart 1.5 years; Boggie II 11 months. Of four bottlenosed dolphins captured in the summer of 1981, none remain. One died by the fall of 1981; the other three suffered ulcers and were emergency evacuated to Florida. Two harbour seals died within 16 months of arrival. Is this the fate awaiting the two beluga whales? Belugas are true whales-15 foot, one ton cousins of the larger, great whales. They are, like all marine mammals, considered threatened by habitat destruction and pollution. No viable young have ever been produced in captivity. Considered one of the most intelligent and vocal of all the whales, the belugas live almost entirely along the edge of artic ice, consuming a wide variety of living food. Nothing close to their natural environment can be simulated at the aquarium. A life of boredom constriction and an early death is guaranteed for captive whales

In the US, Whale and Dolphin Aquariums are Big Business

While an Australian government committee has just recommended leaving whales and dolphins in the sea where they belong, US cities can't seem to build aquariums fast enough to satisfy the seemingly unquenchable desire of the American public to see living cetaceans. Lured by tourist dollars, about 30 American cities are planning or building large aquariums, according to The Wall Street Journal. Construction of just 20 of them would double the number of professionally run aquariums in the country. Cities long to duplicate the phenomenal success of the recently-opened waterfront aquariums in Baltimore, Marlyland and Monterey, California; during their first year of operation, each drew more than double the number of visitors anticipated. Their popularity swelled the coffers of nearby shops, restaurants and hotels. 'Aquariums are one of the great growth industries in America' said William Donaldson, the head of Philadelphia's zoo and an advisor to an aquarium project underway in Camden, New Jersey. 'Everybody is interested in aquariums because of the urban renewal that goes on around them.' Civic leaders have begun to realise that all 'Living museums'-aquariums, zoos and botanical gardens—can help cure an ailing local economy. Indianapolis, for example, broke ground last fall on a \$37.5 million zoo three blocks from its downtown convention center. The new zoo is expected to draw a million visitors a year, four times more than the old, less centrally located one did. Aquariums are the biggest hits, however, not only because of the public's fascination with aquatic life, but also because cities want to have year-round compact, downtown attractions. As doomed sports stadiums and convention centers were to the last two decades, aquariums are 'the next generation of civic-boosters projects' said Robert McNulty, president of Partners for Livable Places, a Washington, DC urban-issues clearinghouse. An aquarium, he said, gives a city 'something more colorful to put on the cover of a phone book than a new waste-treatment facility.' Plans to build aquariums to enliven dead waterfront areas are envisioned in Camden, Toronto, Chattanooga, Tennessee, New Orleans, Portland, Maine and Erie, Pennsylvania. In Baltimore and Boston, an aquarium and waterfront revival projects are com-

plete and enormously popular. Baltimore's National Aquarium which opened in 1981 along the city's Inner Harbour, is the example other cities look to, and has become Maryland's major tourist attraction. Although animals are the main attraction, it is their needs that are always forgotten. For example, the Baltimore facility was rented out almost every day until midnight for convention cocktail parties. Waterfowl and all kinds of fish and marine mammals showed stress from the excessive noise and light. They developed infections, became lethargic, and wouldn't mate. Several of the dolphins got ulcers, one died, and finally all had to be moved to another facility in Florida. To meet public demand, the Baltimore facility began exhibiting its first pair of beluga whales in November, despite protest from the animal rights community. Aquariums such as Baltimore's 'don't have the facilities to house a whale, but they are doing so because it will bring the public in' said Jeanne Roush, captive wildlife program director for the Humane Society of the US This isn't an optimum facility for cetaceans' said Nicholas Brown, the aquarium's executive director, but people want to see dolphins and whales.

The American Association of Zoo Veterinarians Annual Meeting at Scotsdale, Arizona in October 1985 included several papers of interest to Marine Mammal scientists. Of particular interest was Lanny Cornell's last census of Captive Marine Mammals for the period 1979–1983. This showed a three-fold growth in the number of acquisitions by captivebirth in cetacea (now at 33%) and to the level of 100% in the Californian sea lion. Other papers included Heavy Metals in Marine Mammals, Rehabilitation of Cetacea (four out of nine successfully), Rehabilitation of Pinnipeds, Diagnostic Ultrasomography of the Bottle-nose Dolphin, Discussion of the first live birth of Commerson's Dolphin in Captivity, Reports of Squamous cell carcinoma in a Californian sea lion and a Pacific White-sided Dolphin, Anaesthesia and Tooth Extraction in the Walrus, Disseminated Coccidioidomycosis in a Californian sea lion, Cortisol levels in Northern Fur seals and Viral Infection in Pinnipeds. The abstracts and papers are edited by Mort and Suzanne Silberman, Emory University, Atlanta, Georgia.

Dr Bill Perrin reports in the January edition of 'Species'—the newsletter of the Survival Service Commission of the IUCN—on the distressing plight of the Baiji (*Lipotes vexillifer*) or White Flag Dolphin of the Changjiang (previously Yangtze) river, which is seriously endangered. It appears to be restricted to less than 13% of its river habitat of some 30 years ago. He pleads for funds and ideas to raise funds to be sent to him at the South West Fisheries Center, La Jolla, California 92037, USA.

The Cetacean Specialist Group record that 'at most

only a few hundred' Baiji remain. 84 miles of the Yangtze river has been declared a reserve with restriction on fishing operations and boat traffic.

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A workshop on the river dolphin is planned, sponsored by the New York Zoological Society, Hubbs Marine Research Institute, the Center for Environmental Action, and the Windstar Foundation, and to which invitations went out from the Institute of Hydrobiology in Wuhan, China to, amongst others, Peter van Bree, the Caldwells, Randy Brill, Lanny Cornell, Margaret Klinowska, Ken Norris, Bill Perrin, G. Pilleri and Sam Ridgeway.

Lack of knowledge of the stocks of Sirenia throughout the world was another main point in the same journal. The four species occur in 90 or so countries, of which only Australia, Japan and the USA are developed. Studies have, however, identified large herds off Brisbane, Australia and along the West Central Coast of Florida. The Saudi Arabian government are planning a Replenishment Programme to conserve the dugong in the Arabian Gulf and the Red Sea where they are still threatened by oil pollution, and where at least 38 were killed in 1983/84 following a huge oil spill. A small group of 20 were seen in 1984 in the Northern Red Sea, and from this evidence a researcher concluded that 'large populations could be present in the Red Sea'.

A recent report revealed that 80 dugong (Dugong dugong) have been killed in one year by becoming entangled in anti-shark nets off the Australian coasts. The shark nets are obviously there to protect humans, and yet the number of humans killed by sharks (around 28 per year) are less than those killed by

lightning strikes, or wasp stings.

The latest Newsletter of the IUCN Cetacean Specialist Group highlights further areas of concern. There are threats to the 'Boutu' (Inia geoffrensis) in Brazil and Peru by the acceleration of commercial fishing and extensive damming of shallow river tributaries, which dry out causing the death of the animals trapped in them. The eye of the male and the dried vagina of the female are used in Brazil in the same way that rhino horn is used and valued in China. The group have urgently to revise their action plan.

The common dolphin (*Delphinium delphis*) is becoming very rare in the Mediterranean. In France, strandings are down to a level of 1%, compared with 9% of all strandings in 1974.

It was also reported that the sighting rate for Fin Whales (Balaenoptera physalus) off Newfoundland and Labrador has declined significantly between 1976 and 1983 even though whaling, for this species, ceased in 1972. The decline may be related to a low capelin (Mallotus villosus)—the species mainly preyed on—biomass in the late 1970's or the development around the same time of a capelin fishery.

Turkey is reported as intending to continue hunting the Black Sea Dolphin which devour '1.5 million tons of the best food fish annually, three time Turkey's annual production'.

Burmeister's porpoise (*Phocoena spinipinnis*) is subjected to a take of 'at least 2000 per year off Peru'. Field studies on this species continue to gather information on abundance as well as on takes.

Only about 40 susu (*Platanista gangetica*) are thought to remain in the Nepalese Ganges with about 20 in Naranyi river. The local population covert

the oil and flesh of this animal, and a future plan for the erection of a high (210 m) dam will destroy the suitability of the habitat of the Karnali Gorge for the dolphin forever.

All these reports point to greater pressures on cetacea in the wild than that which certain organisations condemn dolphinaria for applying to Tursiops truncatus and other plentiful species. What a pity the money and efforts stimulated cannot be applied to more useful problems.