# Need Reverses Trend

Man's need is reversing the depredations man's need threatened

by Barbara Tufty

The urgent need for food for the world's crowded population may prove a powerful factor in halting the slow march of many wild animals toward the edge of extinction.

For thousands of years, man has



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trapped, budgeoned, wounded and killed many wild beasts, often with wantonness and brutality. Now the trend may be reversed as the imminent threat of world famine is giving mankind many sobering new thoughts.

Suddenly, the lumbering elevicious phant. buffalo, water cold-blooded lizmammoth ard. whale and sinuous seal are being regarded as rich sources of necessary protein for human beings. Men are realizing these animals should be scientifically preserved



Seal

and harvested as food, rather than be slaughtered for a few items such as tusks and oil, then left to decompose or be eaten by other animals.

Man's dismal history of exploiting wild animals and his present trends toward conserving them were subjects of symposiums at the week-long annual meeting of the American Association for the Advancement of Science in Washington.

Prime successful example of the about-face thinking on wildlife conservation is the northern fur seal, which breeds on the Pribilof Islands, near the Aleutian Islands. Ever since man first discovered these sociable flippered creatures in the Pacific, he ruthlessly killed them for their fur and meat. Sometimes hunters would beat or kick thousands of defenseless cubs to death for the sheer fun of killing. The seals came so dangerously close to extinction in the early 20th century that various international treaties were drawn up by the United States, Russia, Japan and Canada to help prevent further decline of the species. Today the Pribilof Islands are a special reservation, supervised by the U.S. Fish and Wildlife Service, pointed out Richard S. Peterson, University of California, Santa Cruz. A scientific system of harvesting a certain percentage of surplus young bachelor bulls and females of various ages each year for their pelts, oil and meat has helped restore the species to a stable and productive population. The

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### . . . exploited animals

story of the Pribilof fur seal is one of the finest examples of conservation in action.

By careful studies of the social and reproductive behavior of seals, scientists are understanding population dynamics of these animals, said Dr. Ian A. Mc-Laren of Dalhousie University, Halifax, Nova Scotia. New methods of selectively harvesting specific specimens from a seal herd may bring about genetic changes that can benefit both seals and men, he pointed out. For instance, the ancient quarrel of fishermen against straggling seals which lag behind the migrating herd and snatch prime fish intended for the fishing nets may be ended by weeding out the stragglers and fostering those seals with strong homing instincts. Thus seals will be bred so they will move faster through the oceans to reach their home breeding grounds-and leave the fish en route to the fishermen.

Another example of man's successful management at the eleventh hour is the northeastern Pacific halibut, pointed out J. L. McHugh of the Bureau of Commercial Fisheries. These fish had been hunted so intensely they were close to extinction. But by scientific management and stringent limitation of the harvest, halibut colonies have now been restored, and appear to remain at high levels of productivity. Promising results have also been gained for other valuable fish—the northwestern Atlantic haddock, the Pacific salmon and yellowfin tuna in the eastern Pacific. A continual supply of protein-rich food from the sea seems assured in these cases.

Many animals have been threatened with complete extermination by man's actions. The American bison, for example, used to



Bison Interior

roam the prairies in numbers of more than 60 million before the westward expansion of the United States. Only a few thousand remained before efforts were made to halt the destruction. The American bald eagle, symbol of America, still might disappear from the earth, in spite of last-minute desperate efforts to save it.

One of the most spectacular failures of man to conserve his resources involves the history of the Antarctic blue whale. For centuries whalers pursued the 150-ton beasts as they migrated through the oceans, and killed them with crude weapons. During the last century, the explosive harpoon, the modern whale factory ship and high

powered boats speeded up the whale slaughter, particularly of the blue

whale, largest creature on earth. Attempts at international agreements proved ineffectual and the whale became dangerously scarce. From an estimated 14,500 blue whales in the Antarctic feeding waters in 1932 to 1939, the population dropped to a mere



Antelope Interior

220 in 1963, reported Dr. Douglas G. Chapman, University of Washington, American representative on the international whaling committee. As the blue whale numbers declined, fishermen turned to other whales, such as the fin and sei, and began depleting their numbers. Finally in 1966, members of the whaling committeee brought about a total ban on the pursuit of blue whales. The ban was agreed upon by the three nations still in the whaling business-Norway, Japan and Russia. Whether the blue whale species will survive or whether the protective measure was too late is not known. Dr. Chapman said. The question will remain unanswered until there is more knowledge about the breeding and migrating habits of these giant animals of the deep oceans.

Other histories of serious exploitation involve the California sardine and the East Coast oyster, both of which are valuable sources of food and both of which have been over-exploited by fishermen. The decline of the oyster production is particularly distressing, said McHugh. Much of the scientific knowledge necessary to avert disaster and to reserve the trend has been available for many years, he pointed out, citing the "incredible stupidity of man" to allow such declines to take place.

Many scientists and researchers involved in conservation and wildlife studies believe that the "recreation" aspect of hunting



Elk Interior

and fishing game animals, birds and fish is on the decline. People today are becoming more interested in "shooting with a camera" rather than a gun in our wildlife areas.

The new trend toward saving wild beasts may stem from the realization that these animals can serve as sources of food, as recreation attractions in wildlife reservations, and as objects of scientific studies, possibly as indexes toward better understanding of human behavior.





