THE POLAR BEAR is enjoying a banner year that has already included the signing of a five-nation treaty for its conservation, the start of an intensive five-nation coordinated research effort and a reduction of hunting in most areas.

An annual report summarizing developments concerning marine mammals has been published in the Federal Register as required by the Marine Mammals Protection Act of 1972. The report provides a worldwide current status report on the polar bear.

Polar bears today live in seven clearly identifiable geographic areas of the Arctic Circle - from the Soviet Union's Wrangel Island to western Alaska; along the northern coast of Alaska; across northern Canada; in the Hudson Bay area; in Greenland; around Spitsbergen - Franz Josef Land; and in central Siberia. They are most abundant at the southern edge of the sea ice and make extensive north-south migrations according to the position of the edge of the ice.

Only very general world population estimates are available with the most commonly cited figures ranging from a low of 10,000 to a high of 20,000, although many scientists believe that 20,000 is a minimum estimate.

In Alaska, the kill by native and trophy hunters averaged 250 bears a year until the passage of the Marine Mammals Protection Act which permits hunting only by natives for subsistence. Seven were killed in 1973 and 40 in 1974. An increase in the number of bears was reported along Alaska's...
clined during the first half of the populations in the are no longer century but have now increased and vested in Danish-owned Greenland by taking of a few cubs each year for zoos. The average annual harvest in Spitsbergen, about 300 prior to 1970, has been reduced to an estimated five or six by a five-year moratorium on hunting. The harvest in Danish-owned Greenland by Eskimos for subsistence is 125 to 150 bears per year.

Annual harvests in Canada approached 600 during the early 1960s and are now about 500, although permit hunting under a quota system is being conducted in the Northwest Territories.

Polar bears, which live an average of 25 years, are solitary most of the year except in the spring breeding season when males actively seek out females. They are polygamous: a male will remain with a female for a relatively short time, then seek out another. Females den in the autumn along coastal areas, sometimes on pack ice, and give birth in December. Litters of two are most common. They remain in the den until late March or early April when they break out from beneath the snow pack. Cubs remain with their mother about 28 months, then they separate and the female breeds again.

Scientists have learned through tagging and subsequent recovery of polar bears that the populations are discrete. For example, the bears inhabiting the Beaufort Sea off Alaska's coast constitute a separate and manageable population. In the western part of arctic Alaska, the polar bear population is shared with Russia. Neither of these populations have been adversely affected by hunting or other human activities.

In November, 1973 the five polar bear nations drafted an agreement on the conservation of polar bears which, when ratified, will allow bears to be taken only in areas where they have been taken by traditional means in the past, and will prohibit the use of aircraft and large motorized vessels as aids in taking. The agreement also calls for both national research and cooperative international research and management, especially on populations occurring on the high seas or within more than one national jurisdiction. It provides protection for ecosystems of which polar bears are a part, and by resolution seeks special protection from hunting for denning females, females with cubs and cubs.

However, under U.S. law (the Marine Mammals Protection Act of 1972), Alaskan natives may take polar bears in unlimited numbers regardless of sex and age.

Further, a resolution asks for an international system of hide identification to better control traffic in hides.

The governments of Canada, Norway, Denmark, U.S.S.R. and the United States are conducting intensive long-term investigations. In most of the countries, shorter-term projects funded by universities and grants complement government programs. Research programs are coordinated internationally by a committee of specialists under the auspices of the International Union for Conservation of Nature and Natural Resources.

Regulations for implementing the Marine Mammals Protection Act were published in February 1974. They include a general prohibition against the taking of marine mammals and establish a permit system for scientific research and public display of certain species. Eleven applications for permits were received in May and June 1974. Three were approved, three were rejected and five are still pending. Under this new procedure the U.S. Fish and Wildlife Service was granted a scientific research permit to immobilize and mark as many as 125 polar bears in Alaska.

A total of 90 investigations of violations of the Marine Mammals Protection Act were reported in the past year by Fish and Wildlife Service special agents. Thirty-four of these were referred to the Commerce Department's National Marine Fisheries Service, which had primary jurisdiction. The remainder were either acted upon by the Fish and Wildlife Service or referred to the states involved.

Alaska has requested the return of management authority as provided for in the Marine Mammals Protection Act but no definitive action has been taken on the request. The full potential of Alaska's abundant polar bear resource will not be realized until the state again is an active participant in their management and protection.