

West Greenland, from the population shared with Canada (PBSG 1995). Recent satellite telemetry data indicates four populations: a western population, Baffin Bay, Jones Sound-Norwegian Bay, and Kane Basin. The final analysis and determination of population status will occur in the summer of 1995 after the collection of the last movement data. A re-inventory of population numbers is ongoing. Data collection should be finalized in Baffin Bay by the Fall of 1995 and in Parry Channel by 1997. Canada is not recommending any management action until the study is completed.

Foxe Basin (FB). An 8-year mark-recapture and telemetry study of movements and population size was concluded in 1992. The population estimate of 2,020 is believed to be accurate as the marking effort included the entire area. Polar bears were concentrated on the Southampton Island and Wager Bay areas during the ice-free season, but significant numbers of bears were found throughout the other islands and coastal areas. Because the previous harvest quotas are believed to have reduced the population from about 3,000 in the early 1970's to about 2,000 in 1991, the harvest quota is being incrementally reduced to levels that will permit recovery of this population. The reduction process is described in the NWT Local Management Agreements between the Inuit communities that share these polar bears. The population data are rated as good. The status of the population (Table 3) is shown as decreasing for the 5-year and 3-year average of harvests and the 1993/94 harvest. Of the 100 bears taken in last year's harvest, 48.5 percent were females.

The population is shared with Quebec where the legal bases for regulating polar bear are the Wildlife Conservation and Management Act, 1983; the Order in Council 1 3234, 1971; and the James Bay International Agreement, 1978 (GNWT). Inuit and Indians are allowed to hunt polar bears from three different populations, based on the "guaranteed harvest" levels determined for the James Bay Agreement, as long as the principle of conservation is respected (PBSG 1995). The guaranteed harvest levels are determined between the user groups and the Government of Quebec based on harvest records between 1976 and 1980. The levels are set without knowledge of the size of the polar bear population and without consultation with other user groups that hunt polar bears from the three shared populations. (In fact, The Inuit from Quebec have declined to participate in a management agreement with the NWT as there is some

confusion how a co-management agreement would mesh with the James Bay and Northern Quebec Agreement.) The harvest levels set are 22, 31, and 9 for populations shared in Southern Hudson Bay, Davis Strait, and Foxe Basin, respectively. The Inuit have agreed with the harvest levels, while negotiations are occurring with the Crees. If the "guaranteed harvest" is exceeded, which is uncommon, there is no penalty. The number and sex of polar bears in the harvest are monitored, with age determined on many of them. There has been, however, some concern expressed over the inconsistencies in harvest data. Quebec does not have legislation to protect female polar bears with cubs and bears in dens (GNWT), but the Inuit hunters and trappers in Northern Quebec have agreed to protect them (PBSG 1988).

Davis Strait (DS). The population estimate is 1,400, and is based on field work conducted during the spring from 1976 through 1979. Traditional knowledge observations suggest that the population may have increased since 1979: (a) Hunters from Pangnirtung have reported larger numbers of bears in recent years and in 1994 took their entire quota in less than 2 days; (b) hunters from the Labrador Inuit Association have reported seeing an increased number of bears in the last several years; (c) hunters from Iqaluit report they have harvested the highest proportion of males of any settlement in the NWT due to high densities of bears encountered; and (d) hunters from Lake Harbour report a higher rate of encounters with polar bears in recent years. Observations made by biologists support the traditional knowledge reported by hunters: (a) during surveys conducted in the fall of 1992 and 1993, high densities of bears were found on the Cumberland Peninsula, Baffin Island; (b) the number of bears captured per hour of search time during 1991-94 on the Labrador coast almost doubled from 1976-79; (c) during the above surveys conducted in the 1990's, a large proportion of old adult males were seen (such sightings would not occur in an over-harvested population where the harvest was selective for males); and (d) satellite tracking data from 1991-94 indicate that a large proportion of the population is offshore in the pack ice during the spring and would not have been included in the capture and tagging as part of the 1980 population estimate. Population modeling indicates that the population would need to be at least 1,400 to sustain the present annual kill of 58 polar bear. The 1995 PBTC supported the revision of the population

estimate to 1,400. Further work will be required to resolve the status of polar bears in this population. A joint resolution was signed by Quebec and NWT supporting a co-operative inventory of this population as a high priority. (Newfoundland and Labrador could not attend the meeting where that resolution was developed, but is supportive.) The population data is rated as fair. The status of the population (Table 3) is shown as stable for 3-year average of harvests and the 1993/94 harvest. Of the 58 bears in last year's harvest, 40.6 percent were females.

The Davis Strait population is shared with Quebec, Newfoundland and Labrador, and Greenland. For a discussion of Quebec, see Foxe Basin above. In Newfoundland and Labrador, the legal basis for regulating polar bears is the Wildlife Act, 1970. The current hunting season is limited to residents of the Torngat Electoral District on the northern Labrador coast, with no distinction made between natives and non-natives. To maintain consistency with the International Agreement, tags are issued through the Labrador Inuit Association, with unused tags being accounted for. Land claim negotiations that may affect how polar bears are managed in Newfoundland and Labrador are currently underway. In typical years Greenland harvests no polar bears from the Davis Strait population. In some years, however, ice is blown onto southern Greenland and, on the average, two bears are taken in Greenland. For additional discussion on Greenland's program, see Parry Channel/Baffin Bay above.

Southern Hudson Bay (SH). The population estimate of 1,000 is considered conservative. It is based on a 3-year study mainly along the Ontario coastline of movements and population size using telemetry and mark-recapture. Since a portion of the eastern and western coastal areas was not included in the study area, the calculated estimate of 763 bears was increased to 1,000. In addition, inshore areas were under-sampled because of difficulties in locating polar bears in the inland boreal forest. The study confirmed the population boundary along the Ontario coast during the ice-free season but showed the intermixing with the western Hudson Bay and Foxe Basin populations during the months when the bay is frozen over. The population data is rated as fair. Table 3 shows the status of the population as decreasing for the 5-year and 3-year average harvests, but as stable for the 1993/94 harvest. Of the 45 bears taken