

Alaska Subsistence Migratory Bird Harvest Surveys

Background

The Migratory Bird Treaty Act (16 U.S.C. 703-711) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742d) designate the Department of the Interior as the key agency responsible for the management of migratory bird populations frequenting the United States and for the setting of harvest regulations that allow for the conservation of those populations. These responsibilities include gathering accurate geographical and temporal data on various characteristics of migratory bird harvest. We use these data to promulgate harvest regulations. Annually, we adjust harvest regulations as needed to provide a maximum of subsistence harvest opportunity while keeping migratory bird populations at desired levels.

The Migratory Bird Treaty Act Protocol Amendment (1995) (Amendment) provides for the customary and traditional use of migratory birds and their eggs for subsistence use by indigenous inhabitants of Alaska. The Amendment, however, states that it is not the intent of the Amendment to cause significant increases in the take of species of migratory birds relative to their continental population sizes. A May 20, 1996, letter of submittal from the Department of State to the White House, which officially accompanied the Amendment, specifies the need for harvest monitoring and states that harvest estimates will be collected cooperatively by the Service, the State Department of Fish and Game, and Native organizations within the subsistence eligible areas. Harvest survey data help ensure that customary and traditional use of migratory birds and their eggs for subsistence use by indigenous inhabitants of Alaska does not significantly increase the take of species of migratory birds relative to their continental population sizes.

We have monitored the subsistence harvest in Alaska for the past 14 years through the use of annual household surveys in the most heavily used subsistence harvest areas (e.g., Yukon-Kuskokwim Delta). Continuation of this monitoring will enable tracking of any significant changes or trends in levels of harvest and user participation after legalization of the harvest. The harvest survey method and forms that we use to collect information were recently (October 2003) approved by the Office of Management and Budget (OMB).

These harvest surveys help us gather information on the annual subsistence harvests of up to 53 species of birds, including geese, ducks, swans, cranes, loons, seabirds, shorebirds, and upland game birds. These surveys are conducted by local village resident surveyors in the subsistence-eligible areas of Alaska, under the guidance of Service employees and contractors (such as Alaska Native organizations and the Alaska Department of Fish and Game). The local village surveyors provide us lists of all households in each village. Randomly selected households then receive survey forms from the village surveyor. The household either completes the form independently, or the village surveyor helps the household complete the form. Forms are then turned in to us. The resulting estimates of harvest per household are combined with the complete list of households in the subsistence-eligible areas to provide estimates of the total annual harvest of the up to 53 species of birds.

Results

Recent data on subsistence harvests, available from most of the subsistence-eligible areas of Alaska between 1995 and 2000, indicate an average annual harvest of 236,000 migratory birds. These include geese, ducks, swans, cranes, seabirds and shorebirds. Approximately 80% of this harvest was in western coastal Alaska (from Kivalina in Northwest Arctic Alaska to Port Heiden on the Alaska Peninsula). The remainder of the harvest took place in interior and southern coastal Alaska.

Available data indicate that 70% of total annual subsistence harvest occurs in spring and summer. In most areas, 65-85% of all birds taken are taken in the spring and summer. However, in the Upper Tanana River (Tok) area, and most places in southcoastal Alaska, the bulk of the harvest is taken during fall and winter.

Highest annual spring and summer harvests occur on the Yukon-Kuskokwim (Y-K) Delta. Recent data indicate that, of the entire Alaska spring-summer average subsistence harvest of 165,000 birds between 1995 and 2000, 80,000, or 48%, were taken on the Y-K Delta.

Next highest spring-summer harvests were in the Bering Strait region, (27,000 birds) followed by Bristol Bay and the Northwest Arctic region, which each had reported takes of about 18,000 birds. (No complete recent survey data are available for the North Slope).

The Y-K Delta is also the place of highest fall harvests of migratory birds. Recent data show that, between 1995 and 2000, of the 71,000 birds taken in the subsistence-eligible areas beginning in September, 28% (20,000 birds) were taken on the Y-K Delta. Other high fall harvests were in the Bering Strait region (14,000 birds), Kodiak Island (10,000 birds), and in Bristol Bay and the Aleutian-Pribilof Islands (8000 birds each).

The migratory birds taken in greatest quantities in the subsistence-eligible areas were pintails and mallards (22,000 birds each, annual average) followed by lesser Canada geese (20,000 birds). Next in magnitude were cackling Canada geese (15,000 birds), Pacific white-fronted geese (15,000 birds), black scoters (11,000 birds), and black brant (10,000 birds). Large quantities of pintails, mallards, and black brant were taken in several of the subsistence eligible areas between 1995 and 2000. Most of the lesser and cackling Canada geese, the Pacific white-fronted geese, and the black scoters were taken on the Y-K Delta.

Migratory bird eggs are also an important part of the subsistence diet, particularly in the coastal areas. According to available data, 115,000 eggs were taken annually, on average, in the subsistence-eligible areas between 1995 and 2000. About 89% of the egg harvest occurred in western coastal Alaska. The rest took place in the Aleutian-Pribilof Islands and on Kodiak Island.

The Bering Strait region is the area of highest harvest of migratory bird eggs. Available data indicate a harvest of 41,000 eggs from the Bering Strait region, the majority being murre eggs. The Bristol Bay region took the next highest number of bird eggs: 28,000 eggs, most of them gull

eggs. This is followed by Northwest Arctic Alaska and the Y-K Delta, which each took 14,000 eggs on average. In Northwest Arctic Alaska, most of the eggs taken were gull eggs, followed by murre eggs, whereas on the Y-K Delta, most of the eggs taken were waterfowl eggs.

For the subsistence- eligible areas as a whole, 83% of all migratory bird eggs taken were those of murre, gulls, or other seabirds. Another 15% were waterfowl eggs. The remaining 2% were eggs of loons and shorebirds. Over half of the waterfowl eggs taken between 1995 and 2000, were taken on the Y-K Delta. Most of the rest were taken on the Bering Strait mainland, followed by Northwest Arctic Alaska and Bristol Bay.