

abundant, usually for short periods such as bird migration stopovers. Also, subsistence hunting traditionally is often not for individual purposes, meaning hunters are taking birds to be shared within the community, among several families. Historically, local survival depended on sharing which is a cultural value broadly taught and practiced both within and between communities. Often these designated village hunters are proficient in the techniques necessary to take specific species, for example, hunting murrelets from breeding areas along seaciff ledges. A restrictive daily limit for individual subsistence hunters would significantly constrain customary and traditional practices and limit opportunistic seasonal harvest opportunities within the Alaska subsistence communities.

The Co-management Council does recognize that setting harvest limits may become necessary, especially within local areas and individual species. However, these initial 2003 harvest regulations were not designed to be a complete, all-inclusive set of regulations, but intended to provide an initial framework to formally recognize and provide opportunities for the customary and traditional subsistence uses of migratory birds in Alaska. Within these initial frameworks, the first step in limiting the overall subsistence harvest was to establish a closed species list, that included regional restrictions. Establishing a 30-day closed period during the breeding season also limited the harvest impacts. The eventual need to further adjust levels of harvest take, either regionally or overall, is recognized and will be dealt with by the Co-management Council based on recommendations by their Technical Committee on an individual species basis. These decisions will likely be based on bird population status and past subsistence harvest data. Concepts such as community harvest limits and/or designated hunters may be considered to accommodate customary and traditional subsistence harvest methods.

#### **How Did the Service Come Up With the List of Birds Open to Harvest?**

The Service believed that it was necessary to develop a list of bird species that would be open to subsistence harvest during the spring/summer season. The original list was compiled from subsistence harvest data, with several species added based on their presence in Alaska without written records of subsistence take. The original intent was for the list to be reviewed by the regional management bodies as a

check list. The list was adopted by the Co-management Council as part of the guidelines for the 2003 season. Most of the regions adopted the list as written; however, two regions created their own lists. One regional representative explained that it would take much more time than was available for his region to reduce the list and that, once a bird was removed, it would be more difficult to add it later. Going with the original list was viewed as protecting hunters from prosecution for the rare take of an unlisted bird. To understand this rationale, one must be aware that subsistence hunting is generally opportunistic and does not usually target individual species. Native language names for birds often group closely related species, with no separate names for species within these groups. Also, preferences for individual species differ greatly between villages and individual hunters. As a result, regions are hesitant to remove birds from the list until they are certain they are not taken. The list therefore contains some species that are taken infrequently and opportunistically, but this is still part of the subsistence tradition. The Co-Management Council initially decided to call this list "potentially harvested birds" versus "traditionally harvested birds" because a detailed written documentation of the customary and traditional use patterns for the 106 species listed had not yet been conducted. However, this terminology was leading to some confusion so the Service renamed the list "subsistence birds" to cover the birds open to harvest in 2003.

The "customary and traditional use" of a wildlife species has been defined in Federal regulations (50 CFR part 100.4) as a long-established, consistent pattern of use, incorporating beliefs and customs that have been transmitted from generation to generation. Much of the customary and traditional use information has not been documented in written form, but exists in the form of oral histories from elders, traditional stories, harvest methods taught to children, and traditional knowledge of the birds' natural history shared within a village or region. The only available empirical evidence of customary and traditional use of the harvested bird species comes from Alaska subsistence migratory bird harvest surveys, conducted by Service personnel and contractors and transferred to a computerized database. Due to difficulties in bird species identification, shorebird harvest information has been lumped into "large shorebird" and "small shorebird"

categories. In reality, Alaska subsistence harvests are also conducted in this manner, generally with no targeting or even recognition of individual shorebird species in most cases. In addition, red-faced cormorants, trumpeter swans, Aleutian terns, whiskered auklets, short-eared owls and others have not been targeted in subsistence harvest questionnaires, so little or no numerical harvest data exists. Available summaries of subsistence harvest data include: Page and Wolf 1997; Trost and Drut 2001, 2002; Wentworth 1998; Wentworth and Wong 2001; and Wong and Wentworth 2001.

#### **What Are Birds of Conservation Concern and How Do They Apply to Subsistence Harvest?**

Birds of Conservation Concern (BCC) 2002 (FWS 2002) is the latest document in a continuing effort by the Service to assess and prioritize bird species for conservation purposes (FWS 1982, 1987, 1995; and U.S. Department of the Interior 1990). It identifies bird species at risk due to inherently small populations or restricted ranges, severe population declines, or imminent threats, and thus in need of increased conservation attention to maintain or stabilize populations. The legal authority for this effort is the Fish and Wildlife Conservation Act (FWCA) of 1980, as amended. The 1988 amendment (Pub. L. 100-653, Title VIII) to the FWCA requires the Secretary of the Interior (16 U.S.C. 2901-2912), through the Service, to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543)."

In actuality, and fortunately, few of the species on the BCC lists are in such a precarious state that they will have to be considered for listing as endangered or threatened in the near future. Our goal is to implement preventive management measures that will serve to keep these species off the endangered species list. Proactive conservation clearly is more cost-effective than the extensive recovery efforts required once a species is federally listed under the ESA. The BCC lists are intended to stimulate coordinated and collaborative proactive conservation actions (including research, monitoring, and management) among Federal, State, and private partners. By focusing attention on these highest priority species, the Service hopes to promote greater study and protection of the habitats and ecological communities upon which