John Hyde

Return of the Trumpeters

by Jack Whitman

In 1925, the eminent ornithologist Arthur Bent wrote, "This magnificent bird, the largest of all North American wildfowl, belongs to a vanishing race...." It was thought at the time that fewer than 75 of the birds existed. From those meager remnants which existed in the early part of the century, the trumpeter swan has made a truly miraculous comeback. Populations have continued to struggle, but management, transplanting programs, and protection from harvest are clearly having a positive impact on the swan populations. So much so that in 1968, the federal government officially decreed that the trumpeter swan was no longer an endangered species in the lower 48 states.

For those who have observed North America's native swans in their natural habitat, it is usually an unforgettable vision. The snowy white adults fly with their long necks outstretched, or swim gracefully with heads held regally erect. Often, the snowy white head and plumage is stained a faint rust color, presumably acquired from foraging in mineral-rich, vegetation-choked marshes. The young are generally a dull gray color during their first summer.

Alaska commonly has two species of swans which nest—the tundra swan (formerly the whistling swan) and the larger trumpeter swan. It is generally difficult to distinguish the species under most field conditions, except by voice. The tundra swan's call has been described as "barking" or a high pitched honking reminiscent of the clamor of snow geese, while trumpeters voice a loud call not unlike notes from a trumpet or French horn. Trumpeters generally feed on aquatic or marsh vegetation and have been reported to consume nearly 20 pounds of wet vegetation daily.

After early sightings, discoveries of breeding and wintering trumpeter swan populations in Alaska gave further hope for the trumpeters' recovery. By 1968, researchers had counted nearly 3,000 trumpeters in Alaska. The vast majority of these were along the gulf coast and basins in the southcentral part of the state, but some were found in the Tanana and Kantishna valleys north of the Alaska Range. Scattered swans were also recorded in the upper Kuskokwim Valley.

The Kuskokwim River Valley between McGrath and Minchumina represents an interesting and rather typical documentation of the recent expansion of trumpeter swans into interior Alaska. Following the 1968 surveys when scattered swans were noted, the U.S. Fish and Wildlife Service began standardized surveys in the area in 1975. Thirty-seven swans were counted during that year. By 1990, 781 birds were tallied there, with a statewide total of over 13,000.

During the summer of 1990, it was in the upper Kuskokwim River Valley that I conducted my swan investigations. Few researchers have monitored productivity and survival of young trumpeter swans (cygnets) from hatching, through the summer months, and up to the time they began their first southward migration. Individual nests have been monitored previously, but advancements in science generally require larger sample sizes. Because of their large size (up to 38 pounds), conspicuous white coloration, and open area nesting habits, productivity and mortality can be easily monitored by plane.

During the summer of 1990, I collected over 300 individual observations on 31 nesting pairs of trumpeters from mid-May through the end of August. The upper Kuskokwim River, with its endless meanders, numerous oxbows and side sloughs, and ubiquitous beaver ponds, provides excellent nesting habitat for the swans. In an area where there are only a few scattered villages, human influences are negligible.

Of 22 nesting attempts closely monitored, only one nest was unsuccessful. Evidence strongly suggested that black bear predation was responsible for the egg loss. On one flight about three weeks into incubation of the eggs, I observed scattered nest materials and egg fragments around the nest platform. An adult black bear was seen close to the nest, with adult swans apparently attempting to harass it from the area. Based on previous research conducted elsewhere, both black and brown/grizzly bears have been implicated as trumpeter swan nest predators.

Potential egg and cygnet predators are common in the area. Bears are relatively abundant, as are wolves, red foxes, and wolverines. Potential avian predators include eagles, owls, falcons, gulls, and ravens. Northern pike, some up to 36 pounds, are common in most of the brood-rearing ponds, and are certainly capable of preying on young cygnets.

Of the 21 successful breeding pairs, contact was maintained with 17 broods for the full 10-week period. A minimum of 89 cygnets were produced, yielding a mean brood size at hatching of 4.2 cygnets. By 10 weeks of age, however, 18 of those cygnets had disappeared, bringing the mean brood size by the end of August to 3.4. Although cygnet mortality continued throughout the study period, it was significantly higher during the first 4 weeks than during the remainder.

From the study, it appears that the future of trumpeter swans on their summer range in interior Alaska is quite bright. There also appears to be additional trumpeter swan nesting and brooding habitat that is currently unoccupied, or where low nesting densities now exist. With no large-scale development plans in the Kuskokwim River riparian areas during the near future, it appears that trumpeter swan numbers will continue to climb.

During the early part of the 20th century, North America was faced with accelerating environmental degradation, unrestricted hunting, and negligible concern for nature. However, there were a handful of biologists and wildlife enthusiasts who were concerned about the demise of trumpeter swans, other wildlife, and wild places. There are few modern success stories that are more dramatic or are better documented than the trumpeter's return from the brink of extinction. Aldo Leopold, a leader in early environmental studies, professed that the real superiority of man over beast lies in the fact that man has the unique capacity to mourn death, or find joy in the well-being of another species. Rather than mourn the loss of the trumpeter swan, we now have the luxury of hearing the band play—a band with a full complement of trumpets.

Jack Whitman is the area biologist for the Division of Wildlife Conservation, ADF&G, McGrath. He conducted his observations on his own time, using his plane (and his gas) as a volunteer for the USF&WS, which is the federal agency in charge of monitoring migratory birds. Most of his flights he made early in the morning and late in the evening, in the long light of summer. As a wildlife biologist for ADF&G, his work is primarily concerned with moose in the McGrath area. He will continue his voluntary aerial observations of swans this summer.

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Every five years, the U.S. Fish and Wildlife Service (USFWS) does a survey of trumpeter swans. The survey done in 1990 covered 11 states—Alaska, Washington, Oregon, Idaho, Montana, North Dakota, South Dakota, Nebraska, Michigan, Wisconsin, and Missouri—as well as six provinces and territories in Canada—British Columbia, Alberta, Saskatechewan, Ontario, Yukon Territory, and the Northwest Territories. The results of the survey are now being tabulated and will be released in mid-summer. Copies and information will be available from the Office of Migratory Bird Management, U.S. Fish and Wildlife Service, Laurel, MD 20708.

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