

TRUMPETER SWANS IN THE COMMUNITY - COMOX VALLEY, BRITISH COLUMBIA

Graeme M. Fowler, Ducks Unlimited Canada, 1405 Argus Pl., Comox, BC V9M 3B3

Trumpeter Swans (*Cygnus buccinator*) find suitable winter habitat in many of the estuaries along the coast of British Columbia. Trumpeter Swans overwintering in the Comox Valley, on Vancouver Island, relied heavily on the 1000-hectare Comox Harbour at the mouth of the Courtenay River. Over the years, this estuary has lost the abundance of aquatic vegetation which supported these birds throughout the winter. The agricultural lands adjacent to the estuary have become critical to the survival of the swans. The swans primarily use the estuary for roosting purposes and for a minor source of food. Increased feeding activity occurs when the surrounding agricultural fields are covered with snow. The Trumpeter Swans, when on agricultural land, feed on waste vegetables (potatoes, carrots, parsnips, and corn) and the perennial grasses grown for livestock.

The Comox Valley Waterfowl Management Project (CVWMP) has been managing the overwintering Trumpeter Swan population in the Comox Valley since 1991. The project is funded by the Canadian Wildlife Service and is administered by Ducks Unlimited Canada. The CVWMP was established to address the local farmers concerns of the impact Trumpeter Swans have on agricultural operations and to determine management strategies which would not impede normal farm practices.

Weekly swan counts, conducted throughout the winter by the local natural history society, show swan numbers have been increasing each year. For the past 3 years, Trumpeter Swan counts have peaked at 1191, 1971, and 2141 for 1993, 1994 and 1995 respectively. On 17 December 1996, the number of Trumpeter Swans in the Comox Valley had already reached 2009 (1659 white, 350 grey). Each year, the peak usually occurs in mid-February.

The majority of agricultural land in the Comox Valley is used to grow perennial grasses for livestock (dairy cattle, beef cattle, and sheep). There are also a few mixed-vegetable producers who use the majority of their land for potato production. As a result, the Comox Valley has thousands of acres in cultivated crops which are an attractive source of food for the swans. Unfortunately, the local agriculture producers are unwilling to continue to support the ever-increasing swan population alone. Although the CVWMP has been working with these farms, the

farmers feel the responsibility of supporting these swans lies on the shoulders of all citizens and visitors to the Comox Valley.

The CVWMP farm programs have been very successful at minimizing swan grazing impacts on forage grasses. There are now over 40 farms cooperating with the CVWMP on swan management initiatives. Farmers may cooperate with the project under the Cover Crop Program or the Swan Hazing Program or both.

The cover cropping (lure) program promotes the use of cover crops as an alternate low-cost food source for the swans, and reimburses cooperators \$25 per acre if they allow swans to feed on these crops throughout the winter. These cover crops also provide agriculture benefits, including soil stabilization, nitrogen retention, and soil enrichment. Each year, 10 farms participate in this program, and, together, they plant approximately 500 acres of annual rye grass, winter wheat, oats, barley, and fall rye. These crops are strategically located throughout the Comox Valley to help alleviate swan impacts on the valuable perennial forages normally used by the swans. Cover crops are planted on harvested vegetable fields during late summer and early fall. The CVWMP has been using various planting methods to maximize establishment and winter growth of these crops.

The swan hazing program implements a number of techniques to minimize Trumpeter Swan use of perennial forage grasses. The most effective devices to deter swan feeding on grass fields include trained dogs, black flags, barrels, multicoloured pennants, and cracker shells. Each method has varying degrees of effectiveness depending on field size and condition and weather conditions. Abandoned methods include electronic devices, which were expensive and protected only small areas, air horns, and flagging and flash tape, which required high maintenance. The CVWMP has swan hazing agreements with over 30 farm cooperators, jointly protecting over 1500 acres of perennial grass fields. The success of the hazing program also depends largely on the proximity and condition of the cover crops or other areas where the swans can feed without disturbance.

Government funding for the project is always at risk of being reallocated, reduced, or discontinued. The CVWMP has been spurring on local organizations, businesses, and municipal governments to become actively involved in supporting swan management efforts.

The community has responded by hosting a Trumpeter Swan Festival. The Fourth Annual Trumpeter Swan Festival will be held from 1 February to 8 February. The festival coincides with the City of Courtenay's "Trumpeter Swan Week," their official name for the first full week in February. The nonprofit Trumpeter Swan Sentinel Society (TSSS) has undertaken the task of organizing the festival each year. The society promotes the Comox Valley as "a wonderful place to spend the winter, 2000 Trumpeters can't be wrong." The festival involves many community groups, businesses, schools, municipal governments, the tourism industry, and the agriculture industry. Farmers in the Comox Valley are actually discussing the establishment of swan viewing structures, with an admission fee, on their farms.

The TSSS aims to educate the community on the needs of the overwintering swans and the important role agriculture plays in the health of the population. They inform the public that, if agriculture is not a viable industry in the Comox Valley, then the swans stand to lose a very important food source. The

society promotes a "Buy Local Produce" theme through their annual Harvest Banquet, co-sponsored by the Farmers' Institute and the Farmers' Market Association. The theme for the evening is "Think Like a Swan - Eat Locally Grown Foods." This helps the farmers economically through increased farmgate sales and increases demand for their product. Proceeds from the banquet and the festival are used each year to put on the next year's festival.

The Trumpeter Swan Sentinel Society has also established a wildlife legacy fund. Contributions and surplus festival monies will be put into this fund. This legacy fund will be used to reimburse farmers for the planting of cover crops in the event current funding is discontinued.

Trumpeter Swan management initiatives must continue in the Comox Valley if Trumpeter Swans and agricultural producers are to live in harmony. The local community, by being actively involved in helping find long-term solutions, has shown the farmers that they are willing to help share the costs associated with having these birds in the community. The Trumpeter Swans, which were sometimes called "field maggots and thieves" by farmers, are now being used to promote local farm products and bring community support to the agriculture industry.

For technical information on the Comox Valley Waterfowl Management Project, please contact the author.