

SQUAMISH VALLEY — The Home to Birdies and Eagles

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YOU'VE SEEN the headlines: "Pesticides Kill Canada Geese" . . . "Large Duck Kill from Pesticide Overdose" . . . "Fish Kills Linked to Pesticide Spill." How about "How Green Are These Fairways?" While it is agreed these headlines raise some valid concerns, it sure doesn't describe the conditions found in our little piece of heaven, Squamish Valley. Just the opposite has happened as our golf course has become home to a remarkable story of wildlife enhancement for an entire community.

The Squamish Valley Golf and Country Club is a public golf course found at the end of Howe Sound, on the way to the spectacular resort community of Whistler, B.C. It is an area of natural beauty, including fresh mountain streams, large wooded areas, mountainous terrain, and some of the largest granite outcroppings in North America. At one time it was home to a large number of salmon, eagles, bear, and other wildlife, yet over time, these populations dwindled. It is at this point where the story of wildlife resurgence in Squamish Valley begins.

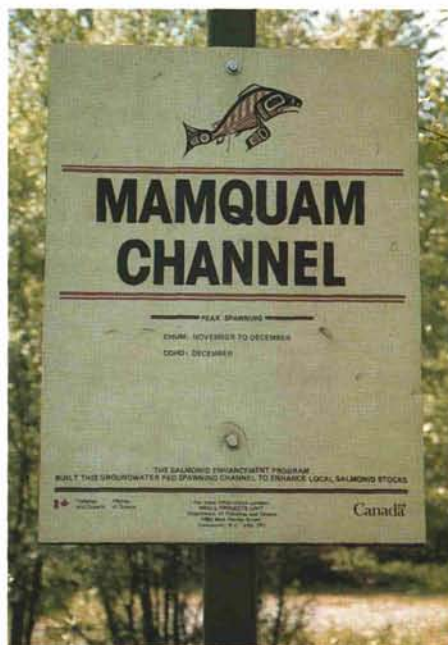
A Natural Catastrophe

We are blessed in our area to have a natural phenomenon that keeps everything green — rain. It usually falls over extended periods, yet seldom causes severe flooding or flash floods. This was not the case during the winter of 1979-1980 when the normally calm Mamquam River decided to overflow its banks. The dike protecting our golf course was overrun on the night of January 1, 1980. With it went the tenth hole and all the four-to-six-foot-circumference spruce trees. If not for the hardiness of the turf, a channel could have cut through the golf course, making holes 8, 9, 11, and 12 a virtual island. Thank goodness for our turf cover!

The next morning we could see that our New Year's resolution would be to get back our golf course and improve the dikes. After two days, the water retreated and local logging road builder Sam Goss was brought in to shore up over a mile of diking.

A Cooperative Effort

When two herbicides are combined and produce results better than when used separately, it is called synergism. When three



The improved Mamquam Channel is now home to millions of salmon fry.

separate human groups must work together to achieve a common goal, it often is termed chaos! Fortunately, we did not have this situation as we addressed the needs of the golf course, the construction company, and the fisheries agency.

With over a mile of diking required and a need to raise the dike by an additional 12 feet, we could see the potential for real problems. Where would all the fill come from? Sam and his crew worked for the next six weeks with available material, but the cost of additional fill was prohibitive. At this point, we discussed an idea that would forever change the relationship of our golf course with local wildlife.

The golf course had a small irrigation pond that was too small for summer use. It was located next to the river and overflowed continually, thus creating a small creek. The salmon liked the shallow creek and pond, so they decided to call it home. The only problem was that the small salmon fry were always plugging the intake and irrigation system. Since material was needed for diking and we needed a larger irrigation pond, our

problems apparently were solved. The only snag left was to take care of the spawning fish.

The Fisheries Department was fond of the spawning pond, yet understood the dilemma. We suggested constructing a spawning channel that would receive a constant flow of water from the river, yet would be protected by the dike. This would create a protected spawning area that, in time, could return large populations of salmon to the river. With some reservations, the Fisheries Department agreed to the idea. We completed the dike and created a spawning channel 65 yards from the golf course.

A Resounding Success

During the fall of 1980, the salmon came back to spawn and moved into our newly constructed Mamquam channel. Due to the shallow water and lack of cover, the chum, sockeye, and coho salmon were easy prey for approximately 20 bald eagles, yet they completed their spawning cycle and the fry returned to the ocean to grow. During the next few years there was little change in the fish populations. Beginning in 1984, the first chum, coho, and sockeye started to reappear with dramatic increases. With beginning numbers of 50 coho in 1984, over 6,000 were counted in 1987. Today's numbers are in excess of 400,000 fry. Chum salmon have grown from several thousand in the mid-1980s to over 4 million fry today!

While the fish stock had a significant increase, our channel had an impact on several other animal populations as well. Increased numbers of coyote, bear, and kingfishers were noted. Various ducks and geese have flourished, though nothing compared to the increase in the bald eagle populations. From a starting point of 20 eagles in 1980, we currently have in excess of 200 that visit in the fall for feeding time. It is quite a sight as these magnificent birds sit in the cottonwoods above the golf course!

A Clean Stream

The story of Squamish Valley is quite different from those in the media denouncing golf courses as bad for the environment. During the entire process, Bob Brown from the federal Fisheries Department helped to



(Top) David Banbury, superintendent at Squamish Valley Golf and CC, works closely with various fisheries agencies to assure success with the spawning pond. (Above) Natural seepage from the river provides a constant flow of water for the spawning salmon.

keep us informed about the ever-increasing numbers of fish in our channels. At the same time, water purity samples have been sent to our provincial laboratories. Little, if any, fertilizers or chemicals have been detected that could have come from the golf course. The survival of the fish eggs in the "eye" stage was 94.5 percent in 1987! This is considered a very high level of survival, thus providing further evidence that our golf course has no negative impact on the fish populations.

So what is the point of the story of Squamish Valley? It is simple. Man can live in harmony with nature. We can actually improve upon nature if given a chance. Golf courses are not toxic waste sites and, if managed properly, can provide an excellent site for the enhancement of wildlife species. We have accomplished this by working with various agencies, not by establishing opposite views and being confrontational. It may work at your golf course if you face a similar situation. Above all, our little golf course has proven to be a big asset to our community, and we take pride in Squamish Valley — the home to birdies and eagles!