Telluride Leaves It to Beaver

Resort finds a way to co-exist with native engineers.

BY PAT DREW

We consider beavers to be one of Colorado's most fascinating and watchable wildlife species. But they sometimes interfere with human engineering, as was the case of Telluride Golf Club when they flooded our 13th fairway. When beavers moved into one of our wetland restoration sites, we quickly began to seek solutions.

Among the options for controlling beaver are fencing, trapping, and live trap and transfer. But these fall short of being good permanent solutions. We wanted a solution that would prevent the beaver's harmful impact to the golf course, but still allow them to build and develop wetland ecosystems while co-existing with golfers.

What we discovered is a device called a beaver pond leveler or *Beaver Deceiver.* The Beaver Deceiver was invented by Skip Lisle, a wildlife biologist who beaver-proofed 130,000 acres of Penobscot Indian lands in Maine. He coined the name Beaver Deceiver, though the device is one you build yourself to meet site-specific needs.

The Beaver Deceiver is a simple device that will set and maintain the maximum water surface elevation for a body of water that is being manipulated by beavers. Essentially, it consists of a caged filter that feeds a culvert that runs through the beaver dam. An upright drain is set at the maximum water surface elevation determined for the pond. When the pond reaches the maximum height set, water begins to flow through the culvert rather than continue to raise the pond water level and cause flooding. Since the beavers are unable to plug the caged filter, the desired water level is maintained.

IMPLEMENTATION AND MAINTENANCE

Before installing the Beaver Deceiver, we gathered resources from a local wildlife organization and from Clemson University, which has a useful video entitled *Beaver Pond Leveler.* This gave us helpful information on beavers, as well as good instructions for the project.

Approval for the project was granted by the EPA and Army Corps of Engineers, since the site was wetland mitigation associated with a permit for golf course development. The beavers were essential in creating and maintaining the wetland mitigation complex, so finding a solution that would not displace them was imperative.

We removed the beaver dam initially to drain the beaver pond and install our Beaver Deceiver. We set the culvert and upright drain to go through the dam and then covered it with some of the logs from the original dam. This encouraged the beavers to reconstruct and repair their dam. Since the device is set up to drain only at the set maximum water elevation, the beavers continue to build and service their dam until the maximum water level is reached.

We set the maximum water surface elevation high enough to cover the entire apparatus underwater, so it is hidden from the casual observer. The unit requires minimal maintenance, but we monitor it regularly to ensure that it is functioning properly.

RESULTS

Our Beaver Deceiver has been in place for three years now and *it works.* The beavers rebuilt their dam and ponds and are maintaining a healthy wetland ecosystem. Several bird species use this habitat for nesting or rearing fledglings, and deer, elk, and other mammals also take advantage of the habitat.

For an investment of $250 from our resort's environmental department and 20 hours of labor to install the device, we save 10 man-hours a week from no longer having to remove the dam and deal with associated damage.

The golfers take interest in the habitat created by the beavers and enjoy the wildlife and waterfowl that thrive here because of it. The site has been used for demonstrations on the functioning of the Beaver Deceiver, as well as for school field trips to learn about and watch the beaver ecosystem. The project also has been written up in our local watershed newsletter as a sensitive solution for dealing with growing beaver populations.

The project is a complete success, and I would recommend it to other courses experiencing beaver problems. Be sure to get proper permit approvals before attempting installation of any devices in streams and wetlands.

RESOURCES

The Clemson Beaver Pond Leveler: http://-www.clemson.edu/psapublishing/PAGES/-AFW/AFW1.PDF.

Department of Natural Resources and Parks, King County, Wash.: http://dnr.metrokc.gov/-wlr/Dss/beavers/beaverintro.htm.

The Humane Society of the United States: http://www.hsus.org/ace/14333.

Skip Lisle, Beaver Deceivers, Inc., (802) 843-1017.

The U.S. Fish and Wildlife Service Partners for Wildlife Program — may supply funding and/or materials for a beaver water level control device if an organized entity applies: http://partners.fws.gov/.

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