

Nebraska: Making the Most of Aquatic Habitats

Some waters are intentionally designed to be urban fisheries. Others become urban fisheries by default. The latter was the case for Holmes Lake in Lincoln, Nebraska. When the Corps of Engineers created the flood control impoundment back in the 1950's, many regarded it as "out in the country."

By the 1990's, however, the 100-acre lake was literally ringed by suburbia. And with the intervening decades of development came the almost inevitable and predictable decline: too many nutrients; a fishery dominated by undesirable species like common carp and gizzard shad; and the accumulation of a staggering half million cubic yards of sediment.

Still, anglers in the Greater Lincoln area and the fisheries staff at the Nebraska Game and Parks Commission were not about to write Holmes off.

Thanks to Nebraska's innovative and far-sighted Aquatic Habitat Program, Holmes Lake and dozens of other waters around the state are gaining a new lease on life. The program is the result of a strong grass-roots angler initiative to fund a special effort to restore declining fisheries. As a result, Nebraska's Aquatic Habitat Stamp became a requirement for most Nebraska anglers in 1997. Over the subsequent decade it has generated more than \$9.5 million.

As impressive as that figure is on its own, it also provided "leverage" to apply nearly \$17 million more to Nebraska's Aquatic Habitat Program. Much of the additional money came through the Sport Fish Restoration fund, a special excise tax collected on fishing tackle and motorboat fuel. These are the funds provided by anglers and boaters each time they purchase the equipment and fuel essential to their outdoor pursuits.

Holmes Lake was on the original list of lakes identified by Nebraska anglers in the early 1990's for intensive restoration work. But it was a job that posed many special challenges, not the least of which was the sediment.

Removing decades of accumulated silt can be very expensive – and finding a suitable disposal site is almost impossible. Engineers decided that trucking the sediment offsite would be cost-prohibitive and would be unpopular with surrounding neighborhoods.

They opted instead for on-site disposal of the excavated silt. Over a two-year span of the reclamation effort (2002–2003), contractors removed almost 300,000 cubic yards of sediment – equivalent to a football field piled over 45 feet high.

An improvement? Certainly. But restoration of Holmes Lake involved more than sediment removal. Virtually all upstream conditions in the basin – the homes, yards, pets and non-migratory Canadian geese – remained the same. To slow the future build-up of harmful nutrients demanded a creative approach for run-off and drainage management.

In Holmes' case, it meant wetland enhancement upstream to trap and slow nutrient loads that would have surged back into the lake. Thus far it has worked well. What was once a turbid and algae-plagued pool is now a lake restored to relative clarity and a pretty remarkable urban sport fishery. Use has quadrupled since the lake has refilled.

Biologists and resource managers with Nebraska Game and Parks, as well as Nebraska anglers, are justifiably proud of their pace-setting Aquatic Habitat Program. It has demonstrated anew the flexibility and worth of the SFR funds.

To date, the blend of Aquatic Habitat Program and SFR funding have created a “fountain of youth” for more than 40 of Nebraska’s impounded waters. In the case of Holmes Lake, the rejuvenation equals more than 85 added years of effective reservoir life – something to keep Lincoln-area anglers and other users smiling for a long time to come.