Peregrine falcons on the rise in Tahoe

Publisher's note: ***This article first appeared in Tahoe In Depth and is reprinted with permission.***

By Will Richardson

It's August at Lake Tahoe, the peak of shorebird migration, and the low water level means ample beach and mudflat habitat at the delta formed by the Upper Truckee River and Trout Creek.

Sandpipers and plovers of a dozen species are spread out along the beach, feverishly fueling up for the next leg of their southbound journey, when suddenly – panic. The birds alight, coalescing into a swirling aerial ball, fragmenting and reorganizing. The swarm stretches and splits into two groups as a peregrine falcon slices straight through the middle of the flock, plucking an indecisive straggler along the way. It's a thrilling spectacle, but less common at Tahoe until recent years.

The peregrine's name means "wandering falcon" and it has the most extensive natural range of any bird species on the planet. Prior to the Comstock era, it is likely that peregrine falcons were regular breeders in, and certainly would have been regular migrants though, the Lake Tahoe region. An 1877 report by the U.S. Geological Survey describes the species as "met with frequently in early fall."

As recently as the early 1940s, peregrines were known to nest at Echo Summit and Cave Rock, but over the course of the next several decades, the species experienced precipitous population declines around the world due to the use of organochlorine insecticides like DDT, aldrin, and dieldrin.

A peregrine falcon eats a band-tailed pigeon near Sand Harbor. Photo/Will Richardson

The approximately 3,875 breeding pairs of peregrines in North America prior to the 1940s declined to 324 breeding pairs at their lowest point in 1975. DDT use was banned in the U.S., Canada, and most of Western Europe by the early 1970s, but it took many years to bring the species back from the brink.

One method used to promote rapid population growth and expansion was captive breeding and hacking. Nestling birds hatched from captive breeding programs (often involving falconry birds in the case of peregrine falcons) were reared in a wooden box to help protect them from predators and weather, and these boxes were placed at unoccupied but otherwise suitable nesting sites, typically a high cliff, a couple of weeks prior to fledging. Once the birds had been at the site for five to 10 days, the box was opened, giving these

birds the freedom to move around the site, flap their wings, and build strength.

Biologists provided the birds food throughout the hacking process, but there was minimal contact and biologists often used hand puppets to simulate feeding behavior of adult birds. From 1985 through 1991, 18 juveniles were released at two hack sites in Tahoe, one at Luther Rock and one at Eagle Falls. All 18 birds successfully fledged and dispersed, and the program was considered a success, though where these birds ultimately dispersed to is anybody's guess. Migrants and presumed transients would steadily increase during the 1990s and 2000s, but it was 22 years since the last hacking effort at Luther Rock before peregrines were confirmed to be breeding again at Lake Tahoe.

In 2007, peregrine falcons were observed in late summer near both South Maggies Peak and Angora Peak. Further investigations revealed that a rock-climbing biologist had observed a peregrine at Luther Rock in 2006. In 2008, the wildlife crew of the U.S. Forest Service Lake Tahoe Basin Management Unit began monitoring potential nesting sites based on a 1980 nesting survey, and the following year a nest was found at Luther Rock.

What's more, the pair at that nest successfully fledged two young. By 2011, a second nest was discovered at Castle Rock. In 2014, a third nesting pair was confirmed at Cave Rock, and this summer a fourth nest was found at Eagle Lake. Thanks to heroic efforts on a shoestring budget, the wildlife crew at LTBMU has managed to confirm that each of these locations has remained active since they were first found, typical of the species, and a minimum of 20 juveniles has fledged at Lake Tahoe over the last seven years. This is truly an impressive rebound for the peregrine.

Birders and biologists rejoice at the return of the peregrine to Tahoe. Their great speed and hunting skill can be

exhilarating to observe. As Forest Service biologist Shay Zanetti points out, “they add an exciting element to the basin ecology.” But perhaps more importantly, they belong here.

Now we need to make sure we can sustain all of these breeding predators, and foraging habitat may prove limiting. Peregrines prefer to hunt water birds and were once known as “Duck Hawks” in this country.

Prior to the construction of the first dam at Tahoe City in the 1860s, there was far more shorebird and wetland habitat distributed around the lake’s shoreline. Extensive beaches and mudflats were perhaps more consistently available from year to year. Now the best waterfowl and shorebird habitat has been reduced and concentrated into a few small pockets, especially when the lake is full.

Thus, we need to consider the peregrine falcon, perhaps nesting miles away on some craggy cliff side, when setting policy that can affect the bird population at a given location. That’s why it’s important for dog owners to keep their pets on a leash at the Upper Truckee Marsh or many of Tahoe’s beaches. But it also applies to forest management practices that might affect band-tailed pigeons, Steller’s jays, Northern flickers, or other birds the peregrine relies on for food. To support a healthy population of peregrine falcons at Lake Tahoe, we need healthy populations of the other bird species as well. Based on the recent trajectory of peregrine recovery at Tahoe, it appears things are looking up.

Will Richardson is co-founder and co-executive director and director of applied science at the Tahoe Institute for Natural Science.