Biologist wants new state park at popular Interior Alaska lake

Bill Sherwonit | Oct 30, 2012

Over the past 40 years, Fairbanks resident Dave Klein has come to know the Quartz Lake-Shaw Creek Flats area as well as any Alaskan, if not better. That's how long he's owned a recreational cabin along the shores of Quartz Lake, widely known as one of Interior Alaska's premier fishing spots. But Klein's interest in this place runs far deeper than outdoor recreation.

An emeritus professor of wildlife ecology at UAF's Institute of Arctic Biology and Department of Biology and Wildlife -- and one of Alaska's most highly regarded wildlife scientists -- Klein has taken a professional interest in the lake and its neighboring wetlands, about 80 road miles southeast of Fairbanks. And what he's learned about this ecosystem (with the substantial help of scientific colleagues) has convinced him it deserves both special status and considerably more protection than it is currently receiving. He's especially concerned about growing motorized threats to the area's rich fish and wildlife habitat.

At present a small fraction of this place, about 600 acres, is included within the Quartz Lake State Recreational Area. Klein says the state's Division of Parks and Outdoor Recreation has done an admirable job of managing that unit, especially given its limited funds and staff, and the steadily growing numbers of Alaskans and tourists who've been drawn by the area's beauty and opportunities to harvest fish and wildlife and more generally play outdoors. But he believes that increased crowds and changing recreational patterns -- especially the recent growth of airboating in the flats -- require new and greater safeguards. And so Klein has begun to push for the creation of a “full-fledged state park,” considerably larger than the existing recreational area, with tighter controls on certain damaging activities.

He has also proposed increased protections for the area's beavers and would like to see airboat use restricted, in order to better preserve the biological richness and integrity of a place that has attracted and sustained members of our species since “the arrival of the first peoples entering Alaska to the present,” a span of close to 15,000 years.
That remarkably long human connection, says Klein, is part of what makes the Quartz Lake-Shaw Creek Flats area so special, even unique, and warrants its recognition as a world-cultural heritage site.

In what has so far largely been a one-man campaign, Klein has reached out to state officials in both the Departments of Natural Resources (DNR) and Fish and Game (F&G), which have overlapping management responsibilities here. (To complicate matters even more, the Department of Environmental Conservation or DEC regulates the water quality of Quartz Lake and the neighboring flats, another concern of Klein’s.)

So far, the state hasn’t been much help. Klein says officials have agreed, “Yeah, you’ve got a problem.” But they haven’t worked with him on finding solutions. So he’s reaching out in other ways, while trying to increase public awareness of a special place and the growing threats to it.

**Popular, sure, but is it special?**

Some might naturally wonder why they should take Klein’s word that this place is so special, even unique, that it deserves better protections and more intense management. He may be an esteemed ecologist, but he’s only one guy.

It turns out that Klein has assembled a large team of scientists, most of them associated with the University of Alaska, and for several years they’ve conducted a wide assortment of studies here, through the Quartz Lake-Shaw Creek Flats Multidisciplinary Project (titled “Tracking Ecological Change from Earliest Human Arrival in Alaska to the Present”). Those disciplines include ecology, archaeology, geology, hydrology and climate-change science, with sub-disciplines ranging from fish and wildlife management to cultural anthropology, botany, water and soil chemistry, and population biology. In other words, Klein and his colleagues have been investigating just about everything there is to know about the nature of this place.

One of the more dramatic, and both scientifically and culturally significant, findings is that humans have lived here, off and on, for many thousands of years. Archaeologists working at Quartz Lake have found evidence that suggests “several episodes of human cultures dating at least back to 13,000 BP (before present)” while some sites along the western edges of the Shaw Creek Flats are older than 14,000 BP, “making these sites the oldest to date in Alaska.”

Besides their cultural significance, Klein says the studies clearly show that people have been dependent on the area’s “high biological productivity” for thousands of years, right up to now.

Which brings us, in a roundabout way, to Klein’s interest in beavers and concerns for their protection.

The proclivity of beavers to build dams, along with their associated cutting of trees and shrubs, has had a major influence on the ecology and hydrology of the Quartz Lake-Falls Creek Flats ecosystem. The multidisciplinary project spearheaded by Klein has provided strong evidence that, when they’re abundant, beavers’ dam-building activities have helped to slow the seasonal flow of water through these wetlands and raised water levels while, in his words, “generally improving habitat conditions for moose, swans, other waterfowl, fish, and most of the fur-bearing mammals that inhabit the flats.”

In short, he says, "Where there are beaver dams, biological productivity is higher."
As might be expected, beaver numbers have fluctuated substantially over time, with periodic highs and lows. Some of the lows have been directly tied to overharvest by trappers. Though trapping in recent decades hasn’t been excessive, Klein says it has kept beaver numbers below what’s necessary to maintain the extensive dam system that ensures sustained water flow and higher water levels, which in turn benefits a wide array of species found here, for instance grayling, burbot, salmon, rainbow trout and char, (the latter two species stocked in Quartz Lake), nesting swans, geese, ducks, and other wetland birds, along with other fur bearers and moose.

To boost their numbers, Klein wants to restrict local trapping of beavers.

Yet even if beavers were to gain new protections, there’s another, newer problem to be addressed: an invasion of airboats into the Shaw Creek Flats. Over the past five years or so, Klein and others who own property in the area have witnessed a significant increase in airboat traffic.

No one is accusing the airboaters of doing intentional harm. But Klein has found places where they’ve damaged beaver dams and/or prevented the dams’ reconstruction; at the same time, he’s observed “speeding airboats” scatter young broods of ducks, specifically buffleheads, goldeneyes, and pintails. He’s certain that the summertime use of airboats “prevents beavers from building and maintaining dams, thus lowering water tables in the flats and contributing to the serious decline of Quartz Lake’s water levels.” Lowered lake levels have resulted in greater winter fish kills and more generally, “major deterioration of fish habitat” in one of Interior Alaska’s most important sport and subsistence fisheries.

Ken Alt, a retired state fisheries biologist with a cabin on Quartz Lake, is another who worries about the lake’s shrinkage: “The water is going down, no question; it’s gone down four feet since I built my cabin there in 1987 and there’s no sign that’s going to stop. At the same time, weeds are taking over in places. We [cabin owners] are all concerned about that. The bottom line is that we’re losing fish habitat at what’s been an important fishery. We may have already reached a tipping point and the question is whether it’s already too late to do something. I use the lake more than anyone, and I think the fishing has gone to hell the last few years.”

**Acceptable impacts?**

Last December, Klein sent a letter to the commissioners of both DNR and Fish and Game, requesting “an emergency closure of beaver trapping in the Shaw Creek Flats and adjacent Quartz and Lost Lakes.” His letter also emphasized that “successful dam building and maintenance by beavers in the Flats will not be possible without restrictions on use of airboats in the Flats.”

Though neither F&G Commissioner Cora Campbell nor DNR’s Dan Sullivan directly responded to Klein’s request, they assigned others in their departments to do so. On behalf of Fish and Game, Kristy Tibbles wrote that “reports and anecdotal information provided by the public and ADFG personnel suggest there is no threat to the viability of the beaver population in the Shaw Creek-Quartz Lake area. Beaver occur throughout the drainage and the number harvested in this area is low.”

Executive director of the Board of Game, Tibbles also suggested Klein submit a proposal “through the normal board process.”

Brent Goodrum, director of the Division of Mining, Land and Water, replied for DNR. He concluded, “We currently do not have enough information to justify implementing a broad airboat restriction or to support a
ban on beaver trapping.... It is likely that many other factors beyond beaver trapping (or interference by airboats) contribute to the current conditions on Quartz Lake and the Shaw Creek Flats.”

Goodrum also noted, “While minimization of impact is of course encouraged and desired, some impact must be considered acceptable. Airboats are one of many methods generally allowed under current state regulation ... for access on state waters.”

The state’s responses have discouraged Klein, who argues, “We’ve now got lots of good science that shows there’s a problem; an ecologically rich wetland area used by humans for a long time is being degraded by some motorized uses. But our information is being ignored. Certain uses are simply incompatible with the health of this ecosystem, especially the airboats.”

Alt, the retired fisheries biologist, also has been frustrated by the state’s inaction: “Fish and Game staff is just too timid; they won’t touch anything that might be controversial.” And whether F&G or DNR, in Alt’s experience, “the state just doesn’t want to involved.”

Despite his frustrations, Klein does agree with one of Goodrum’s points: other factors are at play, adding to the threats that Quartz Lake and surrounding lands and waters face.

As the area attracts more recreational use, Klein worries about the gradual accumulation of contaminants in Quartz Lake, which scientists’ studies show is an “evaporative lake” with no outlet and thus no turnover or flushing of its waters. That makes it more susceptible to pollution. Klein also notes that bear-baiting hunters driving four-wheelers during the springtime thaw have at times done substantial damage to trails, wetlands and fish habitat.

Process must grow from grassroots

Given the complicated nature of both the problems and state management regimes, and guided by what the multidisciplinary team has learned, Klein has concluded that the best solution is to establish a new state park, much larger than the existing state recreation area and with greater protections for Quartz Lake and neighboring wetlands.

To learn more about the steps needed to establish a new state park, Klein has talked with Division of Parks and Outdoor Recreation staff. They’ve made it clear that the agency itself can’t initiate the process. It has to begin with a local, grassroots, citizens’ effort. And ultimately any proposed park needs to be approved by the Alaska Legislature.

Claire LeClair, state parks’ deputy director and chief of field operations, further clarifies that, “We can’t take a position on any proposal to create a park, but we can answer technical questions about the process.” And she suggests that Klein and other park advocates begin by making their pitch to the local state parks advisory board and legislators who represent the area.

Before doing even that, Klein has begun to poll his neighbors. Not surprisingly, some of Quartz Lake's 40 or so cabin owners oppose any new park or “more government regulations.” But Klein says enough of them do support his idea that he’s encouraged.

Alt, one of Klein’s allies, isn’t so sure. “I hope Dave’s right. But from what I’ve heard, most [Quartz Lake] landowners are opposed to the idea of a new park. People worry about losing access to their places,
losing their freedoms. They’re worried about more government intrusion. I’ve been surprised by what I’ve heard.”

Another who questions the degree of local support is Dean Seibold, a musher and seasonal worker who also owns a cabin at Quartz Lake. Like Alt, Seibold backs Klein’s effort. “There’s no question the lake is shrinking, getting smaller and smaller. I think Dave is doing the right thing, to defend it. Maybe a new park will make things better. But I think there’s going to be a lot of resistance from other landowners. People don’t want more regulation, they don’t want to be told what to do.”

It appears, then, that Klein has some convincing to do. Besides his Quartz Lake neighbors, he also hopes to get other Interior residents (and Alaskans generally) to support his nascent push for new parkland. The timing is important, because DNR is in the process of revising and updating its Eastern Tanana Area Plan, which includes the Quartz Lake-Shaw Creek Flats locale. Comments supporting a new park would obviously help.

Recognizing that some of his concerns -- and solutions -- might stir opposition, Klein emphasizes, “I don’t want polarization, I want better management and greater protections of what’s a unique and ecologically rich place,” a place that’s been deeply valued by people for many thousands of years, up to the present, and one worth preserving.

**Bill Sherwonit** has contributed essays and articles to a wide variety of publications (both traditional and online) and is the author of 13 books, most recently Changing Paths: Travels and Meditations in Alaska's Arctic Wilderness and Chugach State Park: Alaska's Accessible Wilderness, the latter a collaboration with photographer Carl Battreall.