Discoveries

News & views from Discovery Southeast

Winter 1997

Bears and us

Richard Carstensen

The loveliest bird song I ever heard was the first thin trill of a plain old varied thrush, at 3:30 AM, July 18, 1992. The song was so beautiful because I was alone on a bedrock spit at the mouth of Stag Bay, on Chichagof Island, and it was finally dawn. The previous evening I'd scouted and rejected 3 potential campsites, each grazed and trampled by big furry animals. I'd chosen the 4th, scarcely better, where a hulking wad of poorly digested sedges lay fermenting 6 feet from my tent door. Lugging my food bag through old growth to a cache tree, I passed a piece of plastic with 1/2-inch diameter tooth holes. All night I listened anxiously.

Bears refine the senses. Not that I seek bears. I hate adventures when they're happening. But afterward I credit bears' gift, their challenge to my domestic illusions of dominance, ownership, and intellectual superior-



ity. These fall quickly away on a solo paddle through the country of *Ursus* arctos.

This winter, fellow Discovery Foundation naturalist Steve Merli and I are speaking for bears. While our subject might be the "most important

animal in the history of metaphysics in the northern hemisphere" (Paul Shepard, The Others, 1996), our assignment is owed to garbage. The City of Juneau has

contracted with Discovery to develop a bear education program for Dzantik'i Héeni Middle School. Back when the school was just a blueprint, local wildlife biologists cautioned that the area was high-value bear habitat, with a long history of inappropriate people-bear interactions. The building permit eventually mandated that environmental instruction at Dzantik'i Héeni should address:

- "1. The use of forest habitat by black bears and importance of properly disposing of garbage to prevent bears from being attracted to the school site and/or feeding on garbage.
- 2. Safety instructions on how to act in the event of human and bear encounters."

To acquaint ourselves with these issues, Merli and I began by tracking down

some of Juneau's busy bear experts. We soon learned that In this issue the career of a bear expert is not necessarily a lot of fun. They're the ones expected to cheaply solve expensive problems. They pull the trigger. They fetch caches

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Banner: Bear track. But which species? Black or brown? Front or rear foot? Right or left? Answers on page 2 • Left: Canine marks of black bear, can-sampling in garbage dump.















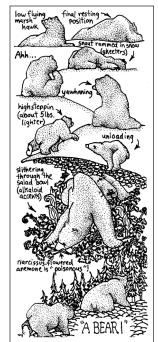












Young black bear foraging uphill above my camp in Yankee Basin; field sketches, June 11, 1981. Sequence reads from bottom to top.

of mangled Pampers from the woods behind our apartments. They escort exiled bruins *out the road*, knowing full well many will return to their undeserved death.

Fortunately, after doing all this, bear experts still love bears. Merli and I want to pass on that devotion to Dzantik'i Héeni's teachers and students.

In Juneau, when people and bears blow it, the buck stops with Matt Robus, Alaska Department of Fish and Game. Matt is intimate with the black bears of Dzantik'i Héeni and adjacent Switzer Village. Bears deemed threatening or nuisances are trapped, ear-tagged, and released near Echo Cove, or less often, skiffed to the south side of Taku Inlet. Neither destination is a sure cure; one male swam the Taku and was back on the garbage beat in 10 days.

Even if the moved bear stays put, Matt is uneasy about this "solution" to our problems. Research hasn't shown whether moved bears succeed in elbowing into already-filled habitat, or if in so doing they displace the previous resident. And back in the original problem site, an emptied feeding niche seduces the next potential garbage addict. Transporting bears may be spreading the addiction to more individuals. Because problem bears aren't usually killed in the yards of problem

people, we mask the cost of our carelessness.

The real, long term solution is making garbage unavailable. If simple respect for bears can't inspire landowners, landlords and tenants to greater care, or motivate trailer courts to invest in secure community dumpsters, an inevitable repeat of the great shootout years of 1987 and 1991 will advertise our indifference. So many bears were destroyed here in '91 that picketers protested Juneau tourism on the docks in Seattle.

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Bear track logo, page 1

It's the left front foot of a black bear. Black bears have more widespread toes than brown bears, in a more arching line. Unlike those of people, a bear's big toe is on the outside. Compare size of outer toes across the 'footers' in this issue

Has any community solved this problem? Are there models of peaceful coexistence between people and bears? California biologist Dale McCullough believes the goal is a fantasy:

"Humans and bears have coevolved as adversaries; to expect peaceful coexistence is both unnatural and unwise."

He advises stern reinforcement of bears' fear of humans, and vice versa, as the best hope of minimizing bloodshed. But in Alaska, as you'd expect of a state almost synonymous with the hope of bear, McCullough's proposed campaign of pervasive segregation of bears from people has not caught on. La Vern Beier of ADFG keeps track of about 50 radio-collared



















brown bears on Admiralty and Chichagof Islands. When we asked him for examples of well managed people-bear interactions, La Vern pointed to Greens Creek Mine in his Admiralty study area. Garbage is burned in an oil-fired incinerator, eating is allowed only in designated areas, and employees can't carry firearms. Littering is a cardinal sin. Bears there are not afraid of people, nor are they pests. In the light of bears' power and our vulnerability, Beier thinks they're remarkably generous. "I trust em. We're not on their menu." He wouldn't condemn bears and people to perpetual, mutual fear. "I just like havin em around. I'd put up with anything to have em near me."

The Pack Creek Cooperative Management Area on Admiralty Island is a well-loved bear watching site, now under joint direction of ADFG and the US Forest Service (USFS). John Neary helps manage Pack Creek for the Admiralty National Monument branch of USFS. Much of what John has learned from daily observation of brownies and people at Pack Creek applies equally to black bears and people in our own back yards, and he annually shares his experience with the 5th grade classes at Auke Bay School.

John alerted Steve Merli and me to a semantic

mistake that may underlie some of the conflict between people and bears—the often-misconstrued meanings of *habituation* and *food conditioning*. In the language of animal behavior, *habituation* is the lessening of a response (in this case fight or flight) through continual nonthreatening contact. *Food conditioning* is an escalating pushiness in response to tasty rewards like kitchen compost or hikers' day packs. A single reward is enough to make *deconditioning* very difficult.

The Pack Creek viewing area, like that of the famous McNeil River Game

Sanctuary on the Alaska Peninsula, offers tightly supervised encounters between tourists and bears, in settings remote from towns and open landfills. These encounters are possible *because bears are habituated*, which might seem odd to those of us accustomed to mis-using the term in a derogatory way. The managers of Pack Creek, and Larry Aumiller who manages McNeil

River, strive for habituation without food conditioning, believing that such *neutrally habituated* bears are safer than 'wary' bears, who are jumpy and capricious around people. In 21 years at McNeil River there were 8 intense charges (none killed), half by wary bears and half by incompletely habituated ones. There has never been a serious incident involving McNeil's fully habituated bears.

I've long wondered how people and bears shared fish streams in pre-contact times, when a village's entire winter food supply was draped on the drying racks, and our most potent weapon was a spear. Maybe neutral habituation works because it's ancient. At the peak of a healthy salmon run, competition wastes time, and relaxed, savvy tolerance makes economic sense. Maybe Pack Creek and McNeil River are clues to our past.

But Pack and McNeil are showcases, not homes.
As tourists there we learn the first of Bear's lessons,
about deference and humility. The advanced lessons come

from shared residence, from foraging side by side, from bear as herald of "the delicate and awful balance between animals and humans." (Catharine McClellan, The Girl Who Married the Bear, 1970) With deepening familiarity we amend the management-oriented behavioral spectrum of conditioned>habituated>wary, to honor the individuality of bears.

Johanna and Robert Fagan, of the University of Alaska, observed bears

and people for 10 years from a tree stand at Pack Creek. They use adjectives that rarely enliven the pages of scientific reports: conceited, devious, flamboyant, grumpy, insecure, nosey, sparkly. The Fagans' conclusions contradict the popular image of bears as predictably hostile to people and to each other. Humans have no patent on personality.

So alike, yet so eerily Other! Our great warm cousin curls cool and toadlike back into the soil each winter. Her den holds death and resurrection. A score of millennia before people entered North America, the first stirrings of our spirituality were kindled by Bear's transformative charisma, and the dance we could not decline.

More than the other animals, bears model for us the large omnivore's respectful use of the earth. Bear taught us the edibles, the seasons when each unfolds. On Xutsnoowú, bear-fortress (Admiralty Island), the Tlingit people gather and stalk the land's riches, in alert proximity to their island's namesake.

I, too, forage on Xutsnoowú, returning to a watershed charged with memories: of subalpine tarp camps, wintry beaches, friends whose ashes are spread there. One of them faced a dominant sow on the mountain, when he was carrying down a deer. She bristled with rage, and he described her reverently, as though he'd seen a spirit. She was utterly unhabituated. I cherish his awe, her teachings, the island's food.

Camper tips

Richard Carstensen

PS 2020: This illustration and many others were part of a 1997 publication created with Steve Merli and Ronalda Cadiente-Brown under Discovery's contract with CBJ. Titled About bears: Juneau bears and their relationship with people, it can be downloaded from JuneauNature:

http://juneaunature.discoverysoutheast.org/content_item/ about-bears/

'Footers' running across pages 1 and 2 of this issue were drawn to illustrate Ronalda's version of The girl who married the bear.

eırner alone a bear trail isn't really brilliant rree too close to tent . camping (ciaw marks reach nigner!) • rood tent . tood strung too low in tree in tent . hook with smelly bait over cooking smelly foods . cleaning fish hsh stream • trash beside tent • camping on bear trail . camping on broblems with camping scene: csmber: Here are a tew of the Advice for the bear-country

