

Discoveries

News & views from Discovery Southeast

Summer 1997

Wild watershed

Richard Carstensen

This May 2nd, dressing for an all-day field trip with my Water Watch students from Dzantik'i Héeni, I discovered I had only one clean T-shirt left. It's a Ray Troll design that reads "*nullum gratuium prandium—There is no free lunch.*" The illustration shows a tweedy dude eating a fish sandwich, and behind him a fish being eaten by a bigger fish, and that one by a still larger one, *ad infinitum*. A little grim for a springtime outing with middle school kids, I thought, but who reads T-shirts anyway? I didn't think about the shirt again until I woke up in it, no longer clean, the following morning.

Our hike was glorious. Sunny skies, fiddleheads, and T-shirt temperatures even in the shade of the old growth. The goal was to bushwack to the upper reaches of the Switzer Creek watershed and to hand over route-finding to the students. Alder House teacher Paula Savikko and I scrambled in the wake of 7 enthusiastic navigators, each with their own map and compass.

On a typical field trip, adult leaders spend a lot of time pleading "*Don't get out of sight.*" But I've worked with this team all year and greatly admire and trust them. I wanted them to get far enough ahead, on an agreed-upon 295° course, to savor the

independence of the off-trail traveler.

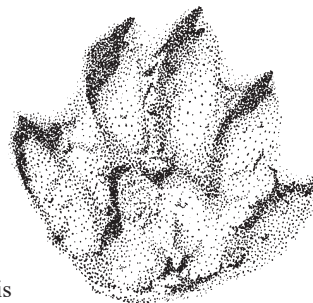
Our hike also demonstrated the extraordinary educational value of Switzer Watershed. Discovery Foundation is participating in the design of a land-use plan for about 100 acres



surrounding Dzantik'i Héeni Middle School. In the opinion of Jon Lyman, Fish and Game aquatic education specialist and former Discovery board member, Dzantik'i Héeni has the richest opportunity to provide holistic watershed education of all the schools in Southeast Alaska. I agree. Throughout Southeast, we've gradually lost our schools' natural surroundings to housing and other developments, making it impossible for a class to walk directly from the building to adjacent nature-study sites. Juneau needs more housing, and natural habitat near schools comes at high cost. The Dzantik'i Héeni land use plan is setting a precedent for school districts throughout the state who are willing to pay that cost, and who want a say in the fate of nearby wild land.

The climb on May 2nd was a day-long taste of that wildness—the climax of this year's watershed study. Here are some highlights from the trip up:

- At 500' on the altimeter, we



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Banner: Webbed-toe print of river otter

found a fresh **goshawk** kill—a freshly stripped bird's 'keel' and wing bones along with a cluster of waxy-sheened wing feathers from a breeding plumage **marbled murrelet**. Murrelets hunt fish in the sea but nest on big mossy limbs high in old-growth conifers. Like most sea birds, these flying plumb bobs “*have no deceleration,*” and zing directly out of the sky onto their roomy nest limbs. So most likely the “gos” nailed this one right on or close to the nest. We craned our necks, searching the towering spruces. How interesting that these two symbols of endangered old growth are eating each other!

• At 700' we heard the high, hollow-sounding *Who cooks for you?* call of a **barred owl**. These birds were rare in Juneau 15 years ago but are increasing. We called back but couldn't lure it in.

• At 800' we found a plate-shaped wad of twig-laced moss on the ground, about 2" thick. It had fallen from one of the big hemlocks above us, and contained a well-compacted depression about the size of a murrelet's tummy. Maybe my imagination was working overtime, but that's the prerogative of a naturalist. There was no 'imported' material in the depression. But murrelets—based on the very few nests ever found—are thought not to bring any hair or vegetation to their nest cup. How could they, fired like bullets straight from ocean to nest limb?

We emerged suddenly from the avalanche-sheared forest at 1,500' above Dzantik'i Héeni, and

climbed single file up dry flood channels carved head-deep and armspan-wide into boulders by violent storm waters. Surrounding these chutes was a mosaic of leafless alder/stink currant thicket and open lady fern turf at the angle of repose. Normally in early May these slopes are deep in snow, deadly slide conductors. But after this dry winter of 96-97 they were already melted free.

• At 1,850' we found a solitary tuft of nibbled sedge tips at the mouth of a **marmot** burrow, but no entryway scats to indicate regular above-ground activity. Not surprising, since the only sprouts poking through the dead ferns in any

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1997 Water Watch team relaxes after climb to forest limit above Dzantik'i Héeni Middle School. Left to right: Sarah Moore, Claire Immamura, DZ teacher Paula Savikko, Karl Twelker, Emily Cotter, Hannah Robus, Alex Sadigi, & Cal Craig.

abundance were poisonous false hellebores. No sign yet of **bears**.

- As we finished a post-lunch nap in the perfect sun, a large nanny **mountain goat** stepped out onto a ledge in the cliffs about 1,000 feet above, still pure white and dressed in her flowing winter coat. We passed around binoculars and admired her classy beard and pantaloons. She'll probably give birth on these cliffs in a few weeks.

Running a bit late, we reset our compasses for DZ and skipped down the mountain, weaving through devils club patches and skirting blow down tangles. At 1200', Paula's eyes settled on the most unusual find of an unusually productive day.

- It was under a log—a size 10 Nike sneaker. Protruding from it was a well-decayed sock and about 15 inches of tibia/fibula, quite triangular in section compared to any leg bones I'm used to handling. The upper ends were

chewed off by a large mammal, and the sneaker's heel bore canine marks that suggested wolf rather than bear. For quite some time the bones had also been feeding the neighborhood mice and voles; tiny incisor cuts decorated their length.

Usually, old bones don't make my heart pound. I accept them as gifts. These demanded payment. Paula searched the immediate surroundings for more remains while I ransacked my pack for the roll of flagging I normally bring for emergencies. Finally I found it hiding under the radio. The more inquisitive of our team came up for subdued and respectful looks.

Well, it was a good object lesson in the value of altimeters, compasses, air photos, contour maps, flagging, and retracable route selection. Not the day's ending I'd have chosen, but as Discovery naturalist and bone-finder Steve Merli counselled on the phone that evening; "*Relax. You're not in control.*" I just hope our team remembers the mountain goat nanny and barred owl's song as vividly as they will the sneaker.

The trip back up on May 3rd with the troopers and Sea Dogs was not as much fun. To my relief, the remains were not the first known part of a lost person. They belonged to a tour ship visitor who disappeared in 1992, and was mostly recovered in 1994 quite close to where we found the sneaker. On the trip down, the hillside shed its solemnity. **Townsend's warblers** trilled from the canopy, and the subtle blossoms of fernleaf goldthread garnished the understory. At 600', we found and measured what I suspect is the largest living tree in Switzer Watershed, an awesome spruce 85" in diameter at breast height and 195' tall.

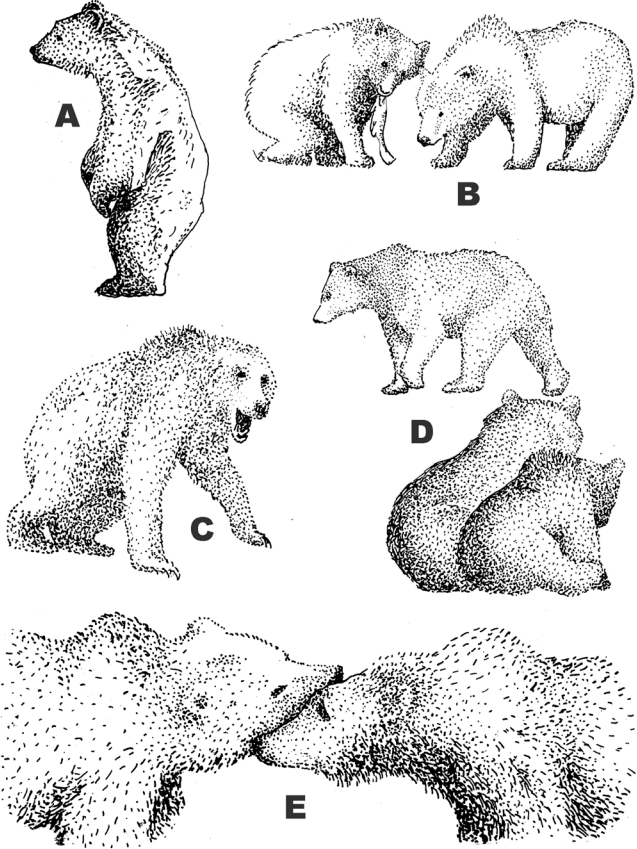
I'm writing this an hour before sunset, May 3rd, in a camp seat in my front yard, soaking up spring's teasing generosity, and enjoying the sore toes and 'good aches' from two consecutive days of bushwhacking. Periodically I stop to knead the charlie horses out of my shin bones, whose shape I can now better visualize. There is no free lunch, and it's so delicious when you pay.



Write your own captions

Richard Carstensen

What does the 'body language' of these bears tell you about their mood and intentions? First, give your own explanation, then compare to ours, at bottom of page.



Behavior captions:

A "Hunh? Who's that?" Standing for a better view.
B "I'm not gonna be pushy about this but I'd sure appreciate if you'd drop that fish." Approaching bear avoids staring. Bear with fish is in a submissive crouch.
C "Go ahead. Make my day." Note flattened ears and raised shoulder hair.
D "That's right buddy, just keep on movin'." Mother bear's direct stare is aggressive.
E "Hmmm, nice perfume!" Boar and sow courting.