

You say “puncheon,” I say “planking”

by Dave Kenagy

This is a special year for our Student Conservation Association (SCA) trail crews at the Kenai Refuge. We always have a summer SCA crew working on trails, but this year we have three crews. The SCA crews focus on building new trails and upgrading popular hiking trails along the Refuge road system, whereas our back-country crews focus on maintenance and tree clearing of remote wilderness trails, such as those of the Tustumena Lake area. The Youth Conservation Corps does some trail work on the Refuge, as well, such as building last year’s Centennial Trail.

Keeping three SCA crews supplied with tools and materials all week long is more than a full-time job, so this year I have an assistant, Morgan Skidmore. Morgan jumped right in, tackled the knotty problem of logistical support and is still able to smile.

Our crew leaders are from Montana, New Hampshire, Alaska, California, and Kansas. Their crew members represent even more states and are all high school students.

It’s great to have folks from all over the country who have expertise in trail-building techniques, but it sometimes creates difficulties in communication.

What we call boardwalk in Alaska, someone from New Hampshire would call bog bridge, and someone from Montana would call puncheon. In other parts of the country it might be known as a topped log bridge or a split log bridge.

But, things get even more complicated. Boardwalk is not exactly the same as bog bridge—they are not constructed the same way. So, even though boardwalk and bog bridge are similar, we have to agree on how the structure will actually be built.

You can imagine the conversations we have in the field. “Well, I think the best thing for this swampy area would be boardwalk.” “Oh, do you mean bog bridge?” “What’s that?” “I think she means puncheon.” “Puncheon, do you mean corduroy?” “I don’t want corduroy, but I think boardwalk would work OK.”

To solve our communication problems we have resorted to arm-waving, and drawing pictures in the dirt with a stick.

Despite differences in definitions we ultimately nailed down a work plan, which the crews have pur-

sued in earnest. To take a look at their handiwork, go for a hike on any of the following trails: Hidden Creek Trail, Vista Trail, Drake-Skookum Lakes Trail, Nest Lake Trail, or Silver Lake Trail.

Let me explain a bit about how we route and build trails on the Kenai Refuge.

First, a word about the tools we use. Most of the work we do is still done with hand tools because high school volunteers are not allowed to use power tools.

You might think that our trail crews do most of their work with axes, rakes, and shovels, but mostly they use specialized trail-building tools, a couple of which came from the fire-fighting community.

The most versatile tool we use is the Pulaski, invented by a man named Ed Pulaski, who was a Forest Service District Ranger in Idaho in the early 1900’s. Ed saw the need for a single fire-fighter’s tool that could be used both to chop wood and to grub roots and soil.

Clever fellow that he was, he simply had a blacksmith twist one blade of a double-bitted axe 90 degrees to make a grubbing hoe, and the Pulaski was born.

Another tool which has a tradition in firefighting is the McLeod. This tool has a beefy hoe on one side and a beefy rake on the other. It’s great for clearing duff and contouring slopes.

Another important tool is the rock bar, which is a steel bar, half round, half square, about 4 feet in length. The square half has a beveled end which comes to a point. It works great for moving rocks, roots or stumps. The only downside is weight—16 to 18 pounds of hard, hammered steel.

There are other tools, of course, such as Sandviks, picks, mattocks, Peavys, drawknives, loppers, adzes, broadaxes, hammers, weedwhackers, sledgehammers, and more.

Well, now that you know something about the tools we use, let’s move on to trail design. We have a few rules of thumb which help us develop trails that are well planned and require little maintenance.

1. First and foremost this is a wildlife refuge, and our highest priority is to assure that trail users do not disturb wildlife, especially during nesting, calving, or denning season. We try, however, route trails so that you can see animals without disturbing them, and

also see spectacular views of mountains, lakes, and rivers.

2. It's important to identify who will use the trail and to build for their needs, interests, and hiking abilities; by doing so we end up with a variety of trails that accommodate a wide range of trail users.

3. Routing trails on south-facing slopes is best. This helps the snow melt earlier in the spring, and helps the trail dry off faster after rain showers.

4. Routing trails on top of hills or ridges, or along the top edges of slopes is also best. This helps the trail drain quickly after a rain, or during spring breakup. Trails routed along ridges or edges seldom need surface maintenance.

5. Grassy meadows look like inviting places to build trails. However, we avoid building trails in most meadows. With few exceptions, meadows are moist during dry periods and wet, muddy, or swampy after rains.

6. Trails should use a minimum of wooden structures. However, we often can't find a route that traverses a ridge, stays on the crown of a hill, or the edge of a slope, so we have no choice but to go through a wet meadow, a swampy marsh, down a steep hill with drainage problems, or across a small creek. That's when the timber-building skills of the trail crews are put to the test.

What do we build with timber? We build puncheon, planking, boardwalk, bog-bridge, corduroy, turnpike, water bars, check dams, check steps, box steps, retaining walls, and bridges. We even build a few timber structures for which there is no formal name.

However, most of our timber building is limited to boardwalk, water bars, check dams, steps and bridges.

I could explain how each of these structures is built, but I'd rather just draw you a picture in the dirt. On second thought, how about a test? Here's how it goes. The names of most of the structures describe them well enough. Take this list with you on Silver Lake Trail, Drake-Skookum Lakes Trail, Hidden Creek Trail, Nest Lake Trail, and Vista Trail and see how many you can identify.

While you're hiking, enjoy the planking/boardwalk/bog bridge/puncheon/topped log bridge/split log bridge or whatever it was that High School SCA crews installed on these trails.

Happy Hiking!

Dave Kenagy is a Park Ranger/Volunteer Coordinator at the Kenai National Wildlife Refuge, who will soon be working on the Refuge Headquarters ski trails so you can enjoy better cross-country skiing this winter. If you have questions about trails, call him at 260-6163. Previous Refuge Notebook columns can be viewed on the Web at <http://www.fws.gov/refuge/kenai/>.