



# AN ALPINE RESTORATION

At over 9,000 feet in the Rocky Mountains, Telluride Golf Course is always covered with snow during the winter.

## *Staff at Telluride Golf Course prepares for the challenge of returning some of its two-mile high golf course to wetlands.*

by LESLEE JAQUETTE

**T**elluride Golf Course, located in the ski resort of Telluride, CO, must virtually start over on some of its golf course. It must rebuild fairways, greens, and tees.

Superintendent Kevin Cahalane and Assistant Superintendent Joe Distefano will oversee \$2.4 million in wetlands restoration over the next three years. At least 11 acres will be affected, including 10 holes and the driving range.

"It's very interesting for us but painful for the developers," says Distefano. "It's made us a

lot more aware of science and hydrology."

The 18-hole, 6,739-yard-long course is owned and operated by the Telluride Ski & Golf Company. It lies on a mesa at 9,300 feet and snakes through wetlands. Four holes are on the ski hill.

Developers in 1989 when they started construction, failed to heed EPA standards requiring mitigations for wetland disturbance on projects larger than one acre. That year the EPA began investigations. While a final decision is expected before summer, Cahalane and Distefano believe that

11 acres of the course (17 if you include the ski hill) will have to be restored. The company has been fined \$1.1 million and will spend five to 20 years monitoring restorations.

Starting in April or May, golf course staff will restore most of the fairways, including plugging or removing up to 25 culverts, and returning acres of fairway to creeks and flood plains. Workers at the course will also have to build 12 bridges so that golfers can get over these wetlands. Holes 12 and 13, in particular, will need a lot of work.

When these changes have been made, much of the area will be regreened with indigenous plants. The seed has already been collected, and plants are being grown in hot-houses in Denver. Sod and

large plants will be used to speed up projects. Most of this work, says Distefano, will be accomplished before play starts in late May.

However, another reconstruction project, which necessitates taking out three acres of fairway on the 11th hole, will most likely disrupt play and be quite costly. To establish a flood plain, this project entails removing part of the fairway and building a berm in a different area. It will also include changing a cart path, building a bridge and planting materials.

"In essence, we're going back to construction phase on this hole," says Distefano.

Other projects include removing five tee boxes on hole number 15. These boxes disturbed the area and will now be rebuilt five to six feet above wetlands. Retaining walls and



plant material will anchor the boxes. This could postpone opening says Distefano due to the number of heavy machines on the project. The largest restoration will re-establish Prospect Creek. It seems the creek was dredged and made into a 1.5-acre pond. As part of the mitigations, crew will re-establish the pond as a creek and riparian area.

Despite the magnitude of the projects, Distefano is not discouraged. "It's hard work but exciting. It's new for us to discover the importance of filtration of alpine areas and the ramifications of damage to alpine and sub-alpine areas," he says.

He adds that the restoration calls for a disciplined approach combining landscape architecture, hydrology, integrated pest management and irrigation. First of all, the plan calls for development of buffer zones and limited use of fertilizers and pesticides. The staff moved to

organic fertilizers on greens several years ago (products manufactured by Ringer, Milorganite and Nature Safe), and is learning to spot treat to deal with pests.

Distefano's staff will also develop a topographical plan to improve irrigation. The course now uses a Toro VT-II system that Distefano says will be upgraded to a computerized system.

Elevation made germination of the Kentucky bluegrass/perennial ryegrass fairways difficult. The staff reseeded after the initial seeding. The irrigation water is so cold and the ground temperature so low (night temperatures can plummet to the 30s even in July) that it took five years for the turf to become acceptable.

Distefano says that people thought the winters would be too cold for the ryegrass, but the snow insulates it, and it does well at elevation. Still, even under the best conditions it takes a summer to grow-in a tee box, he says. And that's using germination blankets and straw mulch.

The golf staff includes a dedicated landscape crew of three. One person works solely on the course's 10,000 square

**Assistant Superintendent Joe Distefano expects a busy season once the snow melts in April, maybe May, perhaps June.**

feet of flower beds, planted mostly with perennials like lupin, columbine, sweet Woodruff, Maltese cross, baby's breath, and Icelandic poppies. Also, the tree landscaper planted 450 trees including aspen and narrow-leaf cottonwood, the only two deciduous trees that grow at this elevation. Blue spruce and Engelman spruce block fairways from houses.

for the ski hill during the winter, giving them benefits and a month to six weeks vacation.

"This excellent rate of return makes things easier on the equipment, saves money and gives the superintendents more time on projects," says Cahalane, who works as a ski patroller in the winter.

Managers keep morale high by planning the annual mid-summer "Mow & Blow" golf



Distefano describes the course as very spread out, with each hole self-contained with many roughs. It takes a large crew and lots of equipment to manage the long-play corridors. The most important and unique piece of equipment on the Telluride Golf Course is the turbo-equipped Jacobsen LF-128 snow blower. Distefano calls it a life-saver, particularly in April and May.

As for labor, Telluride is the kind of place where folks love to live. As a result, the golf course staff remains stable. Most of the employees work

**Aspen is one of the few deciduous trees that grow at Telluride's elevation of 9,000 feet. In late summer and early fall, they turn a beautiful yellow.**

tournament and barbecue. Also, staff plays after 3:30 p.m. every day and everyone gets 2½ days off every week, with only a skeleton crew working on weekends.

"We're real flexible with crew time off because we like to travel too," says Distefano. □

—The author is based in Edmonds, Wa. Photos by Leslee Jaquette.