

WESTSLOPE CUTTHROAT TROUT RESTORATION ON THE SUN RANCH ^{AFS}

Buddy Drake
Drake and Associates
Bozeman, MT 59772

In 1996 the Montana Department of Fish, Wildlife, and Parks (MFWP) initiated an upper Madison River westslope cutthroat recovery project. Part of the project included an extensive inventory of fish distribution, genetics, and baseline fish habitat in the upper Madison River drainage. In 1999 MFWP published a Conservation Agreement for Westslope Cutthroat Trout in Montana. The agreement recommends protecting all existing pure and slightly hybridized westslope populations in each of the major drainages within the fish's historic range, including the Madison. In 2000, the privately owned Sun Ranch and MFWP began discussions on how to execute recovery efforts for westslope cutthroat trout on the Sun Ranch in the upper Madison drainage. A Cooperative Agreement was signed in

February 2001. The Sun Ranch has completed construction of a three-acre brood pond augmented with a solar powered aeration system. Additionally, since Montana implemented rules against wild fish or eggs entering any state or federal hatchery, the ranch built a small private hatchery. This entailed developing a spring, as well as drilling a backup well, to supply water for the incubation system. Even though previous genetic studies indicated that there was only a very slight chance of finding any pure westslope cutthroat trout within the upper Madison drainage, in June of 2001 representatives from the Sun Ranch and MFWP began collecting eggs from both Papoose Creek and Cabin Creek, tributaries of the Madison River. Genetic tests of the donor fish indicated that Papoose Creek was heavily hybridized, but Cabin Creek proved to be 100 percent pure. However, disease testing indicated that the Cabin Creek fish were infected with bacterial kidney disease. In September, 356 westslope cutthroat trout fry, approximately 65 mm in total length, were transferred from the Sun Ranch hatchery to the brood pond. These fish were to be raised and ultimately crossed with other pure westslope cutthroat trout to build gene pool for transplant into donor streams in the future. However, it was later discovered that we had inadvertently disposed of some of the pure Cabin Creek fish, and included hybridized fish in our pond transfer. Since this compromised the genetic purity of the fish in the pond, MFWP is working on an Environmental Assessment to reclaim the brood pond.