

Final Report
Summer Steelhead Survey, 2010 Season
Mattole River Watershed

Cereus Fund of the Trees Foundation

&

U.S. Department of the Interior, Bureau of Land Management
Assistance Agreement No. BCA072012

Report prepared by Amy Baier
Mattole Salmon Group
P.O. Box 188
Petrolia, CA 95558-0188
Phone 707-629-3433 □ Fax 707-629-3435
msg@mattolesalmon.org

The Mattole Salmon Group has been providing enhancement, research, and instream restoration on behalf of native Mattole River salmon since 1980

The 15th Annual Mattole Summer Steelhead Dive occurred July 16-17, 2010. A total of 67.25 miles were surveyed this year. This includes 60.4 accumulated survey miles of the mainstem Mattole and 6.85 miles of tributaries, making this year's dive the most comprehensive basin-wide survey of the past 15 years. Forty-two volunteers observed 14 adult summer steelhead (classified as steelhead greater than 16") and 43 "half-pounders" (fish that range from 12" to 16"). Both summer steelhead and half pounders are fish that have entered the river from the ocean in the spring and early summer, before the river mouth closes for the season. Adult summer steelhead seek out suitable habitat in the river and oversummer there, until the fall when they spawn. Half-pounders are not fully mature and nearly all are incapable of reproduction at that stage in their lives. They may exit the river when the mouth opens – just as any steelhead may opt to do – and re-enter next year or in following years to spawn when they are mature.

This year, adults per mile was the second lowest on record (0.21 fish per mile), following 2003, when divers only observed a total of nine adult fish (0.19 fish per mile). Another year that divers witnessed few adults was 1996, when 14 adults were also found, however fewer miles were surveyed in comparison to this year. Higher water and flow this year may have contributed to fewer observations. While the unusual water conditions made the Summer Steelhead Dive a grand adventure, floating more quickly through the habitat, while keeping aware of increased safety concerns, did make it more difficult to observe fish in some cases.

In addition to looking for larger steelhead, divers also sought out juvenile coho and juvenile Chinook in all of this year's survey reaches, observing a total of 114 coho and 1128 Chinook. Coho were observed exclusively upstream of Anderson Creek (RM 55.6), in the uppermost three survey reaches. Of those observed, all but two were found upstream of Stanley Creek (RM 57.1). The greatest number of Chinook were observed in the estuary, followed by the lower mainstem Mattole from the Hideaway Bridge to Stansberry Creek (the reach just upstream of the estuary). A few other juvenile Chinook were found overwintering in the upper mainstem. Additionally, handful of small schools were observed throughout the river system, likely fish still making their way downstream, lagging behind the big pulse of outmigrants that were observed in the spring.

...And now some notes about dive specifics:

For the 2010 SSD, we surveyed 60.4 accumulated miles of the mainstem. *Accumulated* takes into account that in a couple of reaches there is an overlap of a tenth of a mile or so (due to access logistics), plus the 6.85 miles of tributaries surveyed. The total mileage surveyed altogether is 67.25 miles. In the mainstem, we surveyed from Philips Creek (RM 60.4) to the river mouth

The tributaries we surveyed include Ancestor Creek (RM 60.8), Thompson Creek (RM 58.4), Upper Mill Creek (RM 56.2), Fourmile Creek (RM 34.6), Bear Creek (RM 42.8) and Honeydew Creek (RM 26.5). The MSG has been surveying Bear Creek and Honeydew Creek for many years due to the historical and contemporary presence of adult summer steelhead there. We have consistently done a Thompson Creek survey every year since the dives began in 1996, as this tributary has shown to be an important coho-

bearing stream. With an added emphasis to determine juvenile numbers and distribution of nearly-extinct native Mattole coho, the other headwaters creeks mentioned above were incorporated this year, based on past and/or current presence.

While the primary purpose of MSG's annual Summer Steelhead Dives is to enumerate adult summer steelhead and half-pounders, it should also be recognized that the dive is an important survey effort to comprehensively monitor and observe summer juvenile populations of Chinook and coho, look for aquatic and riparian invasive species, and to get a yearly snapshot of Mattole mainstem and key tributary habitat conditions. It is the *one* time of year when the *entire* mainstem Mattole is surveyed, and in most reaches, the *only* time.

We at the MSG want to sincerely thank all of our dedicated volunteers and staff, both new and returning, who make this dive possible. We also would like to thank the many Mattole landowners who generously grant us access and assist us in getting to and from our dive reaches. We also would like to especially recognize and thank the Cereus Fund of the Trees Foundation who graciously provided the funding for this year's dive. Funds helped pay for staff time for coordination with landowners, volunteers, drivers, and divers. Funds were also used to purchase dive supplies and food and supplies for breakfast for the volunteers on both dive days, a dinner on the training day, and a BBQ in the evening on the final day of diving.