

JARBIDGE RIVER BULL TROUT RECOVERY TEAM

Meeting Summary

Date and Time: October 5, 2006 – 8:00 a.m. to 4:30 p.m. (Pacific)

Location: Community Hall, Jarbidge, Nevada

RT Members Present: John Elliott (NDOW-Elko), Kate Forster (BLM-Twin Falls), Todd Gilmore (FWS-Reno), Jim Harvey (USFS-Sparks), Gary Johnson (NDOW-Elko), Maija Meneks (USFS-Elko), Rob Ryan (IDFG-Jerome), Selena Werdon (FWS-Reno)

RT Members Absent: Tim Burton (BLM-Boise), Rich Haskins (NDOW-Reno), Chris Reighn (FWS-Boise), Laurie Sada (FWS-Reno)

Others Present: Dan Armichardy (BLM-Twin Falls), Jody Charrier (USGS), Pat Connolly (USGS), Emily Hite (USGS), Kyle Marten (USGS), Judy Maule (USGS), Alec Maule (USGS), Matt Mesa (USGS)

USGS 2006 Survey Report

After the round of introductions, Pat Connolly gave a Powerpoint presentation on the USGS's contracted 2006 bull trout (BT) tagging efforts, results, and future plans. Objectives of the project were: 1) Monitor BT movements, distribution, and growth; 2) estimate abundance and density; 3) conduct standard habitat surveys; and 4) develop a strategy to assess population trends. The Passive Integrated Transponder (PIT) tags used were ISO FDX-B 12 mm 134.2 kHz tags placed in the abdominal cavity on small BT and in the dorsal sinus on large BT. Two BT exhibiting prior injuries were not tagged. No direct mortality of BT from electrofishing or tagging activities was noted. A brief summary for each stream and field trip was provided, which is summarized in Table 1.

In summary for 2006 field work, USGS surveyed over 44,000 m of stream, tagged 324 BT, and collected tissue samples for genetics from 237 BT. All fish collected generally appeared healthy. Habitat data (not presented) were collected in pool and non-pool areas. Electrofishing surveys were essentially continuous throughout all habitat types (pools and riffles). BT were often present in riffles with redband trout even in daylight hours. Only a few Age-0 or Age-I BT (100-150 mm) were captured or observed. Surveys were curtailed in some streams due to the presence of spawning or paired BT. Spawning BT were observed as early as August 6.

USGS noted that although solar panels are connected at all three stations, battery changes for the antenna receivers need to occur about three times every 2 weeks. Kate's BLM field crew is covering this for the months of October through December. Based on research in other watersheds, not much BT movement is expected to occur after December. Therefore, USGS is considering removing all three receivers for safe keeping during January and February. The antennas would be left in place throughout the winter months. If they survive the winter, then they could be quickly reconnected to the receivers as weather improves. Need FWS to contact another landowner for the EFJR station, since it ended up at the NW corner instead of the SW corner of the bridge. USGS is considering hooking the EFJR receiver to a direct power source. Two potential sites are the SW corner landowner's residence or a garage with power at the NW corner which is for sale.

Table 1. U.S. Geological Survey stream reach and bull trout data from 2006 electrofishing surveys within the Jarbidge River basin, Elko County, Nevada.

	West Fork Jarbidge River Watershed						East Fork Jarbidge River Watershed						Totals
Stream	WFJR					Pine Creek	Jack Creek	EFJR		Fall Creek	Slide Creek	Dave Creek	
Reach	Gorge Gulch to Sawmill Creek	Pine Creek to Gorge Gulch	Antenna station (between Deer and Jack Cr.)	Bourne Gulch to Pine Creek	Pine Creek upstream	Mouth to ?, plus upper end	Mouth to above Jenny Creek	Slide Creek to 7,333' elevation	Murphy Hot Springs upstream	Lower	Three reaches	Middle nearly to headwtrs.	
2006 Date(s)	July 19-22	Aug. 7	Sept. 23-24	Sept. 24-26	Oct. 4	July 23-26	Sept. 8-11	Aug. 17-19	Oct. 3	Aug. 20	Aug. 22	Aug. 3-6	
Max. Elevation (ft)	>7,500	7,481	5,990	6,690	?	7,834	?	7,333	?	?	7,388	7,418	
Total Reach Length (m)	4,389	1,431	2,213	4,822	500	5,542	5,244	8,001	750	2,310	4,610	5,434	over 44,000
BT Captured	79	5 or 6	1	13	2	27	68	13	0	9	4	112	
BT Tagged	77	5	1	13	2	25	66	13	0	9	2	111	324
BT Clips	41	6	1	13	2	25	59	13	0	9	4	67	237
BT FL range (mm)	86-229	168-205	276	160-330	192-218	39-243	61-310	135-260		119-360	189-300	97-229	61-360
Other		One fish too small to identify ; took clip		BT w/hook in head			Spawning pairs. 20+ BT seen, but all not captured in one pool	Pack trip	Complete native fish species assemblage	Largest BT	Post-spawners seen-work stopped	Spawning pairs on Aug. 6	
BT Captured /Stream	100 or 101					27	68	13		9	4	112	324

USGS 2007 WORK PLAN

FWS extended USGS BT survey contract for an additional year. The same level of funding was provided for surveys, but USGS was given extra funding to complete the equipment purchases directly this time rather than going through FWS. USGS may base a field crew in Twin Falls for 2007. USGS needs a new NDOW permit, but FWS permit is likely good for 5 years. USGS did not obtain IDFG permit in 2006 due to complications in the application process and likely will not apply again in 2007.

1) Existing Antenna Stations

Potentially as early as March, upgrade existing antenna stations as follows.

WFJR - Add one large antenna to the two existing large antennas at this station. This new antenna would be anchored to the substrate. Currently, one antenna is fully anchored flat and the other is a hybrid that is anchored on only one side and can tilt upwards as flow rises.

EFJR – Add two antennas upstream to the existing four vertical antennas at the bridge. The new antennas would be fully anchored flat with distance upstream limited by cable length, landowner permission, and suitable substrates.

Jack Creek – No changes planned for this station in 2007.

2) New Antenna Stations

WFJR/Pine Creek - Add a station on the WFJR at the mouth of Pine Creek. This would be a large receiver that could run two antennas on Pine Creek and four antennas on the WFJR. Direction of BT movement could be determined for both streams from this design. The receiver would be placed on the road side of the WFJR to ensure maintenance access during high flows. Station would require informational signage to protect it given the high level of public use at Pine Creek Campground.

Dave Creek - Add a station on Dave Creek given the high number of BT tagged there in 2006. This would be a small receiver running a single antenna. Road access to Dave Creek is limited to one centrally-located site on private land. The livestock crossing site downstream on BLM land would be a distant second choice, since there is no road down into the canyon there and it is a steep slope. Need FWS to contact landowner for permission.

3) Tagging

Field work involving fish handling will start earlier than in 2006, whenever flows allow. USGS will order another 500 PIT tags. Used 324 of 500 ordered in 2006. USGS will likely make two pack trips to the upper EFJR watershed in 2007. The first would be late June/early July, and the second would occur about the same time as in 2006. USGS will coordinate with the RT on the dates, so RT members can participate if available. Maija will check with David Ashby on availability of the USFS pack animals.

4) Population Estimate(s)

Jack Creek – Perform mark-recapture population estimate delayed from 2006 due to earlier than anticipated BT spawning.

Dave Creek – Selena suggested a mark-recapture on Dave Creek would provide valuable data to the RT given the apparent large size of this local population based on 2006 captures and future antenna site there. It would also provide baseline data for the EFJR drainage, in balance to Jack Creek in the WFJR drainage.

5) BT Growth Estimates

USGS will use 2006 tag recaptures in 2007 to obtain BT growth estimates. Start by doing similar tagging effort in 2007 and get recaptures. Also, revisit short reaches again to obtain growth data for the 2007 summer period as well to compare with BT growth in other watersheds. Growth rates will help with BT age determinations. Temperature data can help in looking at winter energy use. Use to determine when the spring warm-up is occurring, which is important for age-0 fish and emergence times. Need to establish and maintain thermographs at or near the antenna stations.

Thermographs:

Kate – BLM pulled thermographs (list of sites for 2006 provided in handout). Water temperature at the mouth of the Jarbidge River reached 85°F.

Pat – RT should try to keep a couple thermographs in place over the winter. Jack Creek and WFJR would provide useful data.

Maija – USFS has year-round temperature data from Canyon Creek for 2005. It is out of the Jarbidge River watershed, but might serve for comparison data.

Gary – Pulled most thermographs this week. NDOW has previous year-round data for Deer Creek.

6) 2006 Survey Outreach:

FWS will get more survey data from USGS and prepare a non-glossy flier to stakeholders presenting the 2006 data and provide copies at the Jarbidge post office.

End of USGS Session

Other Agenda Item RT Discussions

(not listed in exact order discussed)

Next RT meeting dates – Next RT meeting will be either November 28-29 or November 29-30. Todd will contact RT members not present to determine availability. Gary needs the final set of dates to reserve a room in Elko.

BT Funding Update – Due to the end of the Federal fiscal year, Selena was required to obligate the remaining BT funding at short notice. FWS committed funds to USGS for additional surveys and equipment in 2007 (\$178K). The remaining funds were obligated through an existing FWS ‘Indefinite Delivery – Indefinite Quantity’ contract to a consulting company, Entrix, for BT

stream restoration projects. The scope of work for Entrix has not been completed yet. However, the primary focus will be work at the Jarbidge mine site. Entrix made an initial site visit and has a survey crew working at the mine site this week to gather baseline channel data. FWS sent all available past site data, including 2005 sample analyses. As funding permits, Entrix will be completing additional sample collection and analyses, channel restoration design, adit and/or tailings-waste rock remediation designs, landowner contacts, and explore additional funding options for implementation, etc. In addition, Entrix already completed a half-day site visit (Sept. 6) with the Three Creek Highway District to provide input on proposed erosion control measures along the Jarbidge Canyon road in Idaho. A future site inspection by Entrix will occur when the District completes two projects later this year to help with any last minute design modifications while heavy equipment is still on site.

Genetics – Todd developed a list of five potential researchers to process the BT fin clips collected to date. The list includes Paul Spruell and Fred Allendorf (University of Montana), Jason Dunham (USGS), Bruce Rieman (USFS), and Bill Arden (FWS-Abernathy). Todd is in the process of contacting each researcher to determine rates and availability. IDFG uses Matt Campbell for BT genetics, and he will be added to the list. Completing genetic analyses on the available samples before the 2007 field season is considered a priority by the RT. Gary pointed out that the RT needs to decide what questions to have the genetic analyses address, so the data can be evaluated appropriately. Funding for completing the genetic analyses needs to be obtained.

BLM Resource Management Plan Update – Kate will be contacting RT members in the near future to collect any available data to assist BLM in completing the draft RMP. RT members will be invited to review the draft RMP and comments are welcome. Court-ordered due date for final RMP is September 2009. Next phase will be renewing all grazing permits in the Jarbidge Resource Area. Due to the heavy workload for the RMP, BLM will not be able to complete NEPA compliance documents for any RT projects on BLM lands.

Pole Creek Fencing Project – Selena reported that funding for the project (\$15K) was probably lost at the end of the fiscal year, since USFS contracting paperwork was not completed. Selena and Maija will follow up to see if there is any chance to proceed with the project.

Buck Creek Culvert Survey – Maija has not completed the culvert survey. However, the landowner was interested in a fencing project to relocate livestock use away from the creek. FWS's private lands program coordinator attempted to contact the ranch manager, but no progress has been made to date.

Stakeholder List – Todd received the contact information from the Owyhee County Assessor for landowners in Murphy Hot Springs, Idaho. Approximately 100 new contacts have been added to the BT RT mailing list, which is in an Access database.

Brook Trout Eradication Project – Gary completed another brook trout survey and eradication effort on Bear Creek in July. The occupied reach is approximately 1 mile downstream of the Charleston-Jarbidge Road crossing and is a step-pool channel. Brook trout numbers are low and have dropped each year from 35 to 29 initially, 5 in 2005, and now only 3 adults in 2006. Gary

will draft a few sentences on the results of these efforts to add to the nonnative species section of the draft RP.

Nevada Water Temperature Standards – Gary reported that Tim B. provided data which Gary sent to the Nevada Department of Environmental Protection. Selena will check with FWS's contaminants program staff to see if anything was sent directly to NDEP regarding BT streams.

YOY BT Surveys – Gary completed a third year of summer nighttime young-of-the-year BT surveys on three streams. The Age-0+ BT are 45-55 mm in length and visible along the water's edge. This was the first year that Jack Creek had a drop in numbers – normally 20+, but only 3 in 2006. Surveyed a reach of Pine Creek located approximately 0.5 mile further upstream than in 2005. In 1.5 hours, 10 YOY were observed in Pine Creek. The upper WFJR upstream of Dry Creek had relatively good numbers (~high teens).

Patch Analysis – Kate and Dan did not receive the e-mail Selena forwarded to the RT from Tim Whitesel (FWS) on his completed patch analysis of the Jarbidge River watershed. Since several RT members were not present and/or did not receive the patch analysis, discussions were postponed until the next RT meeting.

Mary's Creek BT Survey – Per Chris, Duck Valley Tribe will not permit or perform surveys. RT must decide the extent of any discussion in the draft RP on potential BT presence.

Additive vs. Compensatory Mortality – Postponed.

Review of RP Agency/RT References – The RT went through the old draft RP and wherever possible (with only some RT members present) confirmed or changed references to *RT*, *FWS*, *we*, and *our* to reflect current RT thoughts.

Review of Draft RP Edits – Agenda item postponed until next meeting when all RT members who provided edits are present.

Second day of RT meeting was cancelled due to other obligations for several RT members and subsequent lack of critical mass.