PIT Tag Steering Committee 2001 Annual Meeting February 1, 2001 Gladstone, OR

Meeting convened at 0830

### In attendance:

Carter Stein (PCS) PSMFC John Tenney (JT) **PSMFC** Dave Marvin (DPM) PSMFC Dave Wills (DW) USFWS Doug Marsh (DPM) NMFS (EFP) NMFS Earl Prentice Ann Setter (AS) ODFW (EWB) IDFG Ed Buettner Scott Putman (SP) IDFG (CFM) WDFW Charlie Morrill Sean Casev

(SC) Destron/Fearing (DF)

Hannis Stoddard (HS) EZID Avid Bryce Jenkinson (BJ) EZID Avid

Sandy Downing (SD) NMFS (by phone)

Kim Fodrea (KF) BPA Pat Poe (PP) **BPA** 

### 1. Review PTSC Charter

- a. There is still a question regarding participation by CRITFC or FPC in PTSC. FPAC suggested that if there is an issue related to CRITFC or FPC, the PTSC should attend FPAC meeting.
- b. Last paragraph in "Membership" section should include 'federal or tribal' representatives.
- c. Need to keep FPAC better informed about the committee's activities (e.g., see "Operating Procedures").
- d. EFP: Suggests that PTSC should take a more active role in keeping tract of or incorporating new PIT tagging technologies. E.g., towed arrays, natal stream detectors, adult ladder detection, sensor tags, etc.
  - 1. AS suggests that data collected through various research studies do not belong in PTAGIS unless project is part of an overall monitoring program such as SMP.
  - 2. BPA has contract language in some PIT tagging project that requires data to be submitted to PTAGIS.
  - 3. Discussion about some projects not submitting data to PTAGIS until research is published. DPM provided an example related to a USGS study. EFP suggested that this is an example of the type of issue that the PTSC should be involved in.

### 2. Elect new chair person

- a. EWB agreed to be new chairperson.
- b. DW agreed to continue as co-chair.
- 3. Alternative Marking Tools Bryce Jenkenson & Hannis Stoddard EZID Avid
  - a. Marketing presentation of Avid readers (power tracker 8) and tags.
  - b. Reiterated 'good practices', 'hands off' needle loading.
  - c. EFP commented that the fisheries community requires product in a timely and efficient manner. We have narrow windows of opportunity for tagging and management decisions that are derived from this interrogation system can impact resources (fisheries, water, electricity, etc.).
    - 1. BJ responded that EZID Avid would not threaten to litigate in a manner which would shut down fisheries PIT tag research.
    - 2. HS responded that EZID Avid has capacity to supply tags in quantities for basin research.
  - d. EFP suggested that the community as a whole welcomes the competition.
  - e. BJ discussed the BPA exclusivity relationship with Destron Fearing
  - f. EFP suggested that this committee should take the lead in addressing performance criteria for tags.
    - 1. PCS suggested that three physical parametrics could be identified to qualify tags. Read speed, reading at adverse geometries, reading tag in groups. These would be addressed for the juvenile interrogation system in a 10 or 12-inch conduit, and for the adult reader in a 24-inch orifice.
    - 2. HS suggests the form factor of the tag needs to be taken into account.
    - 3. The Committee decided to begin development of a tag qualification specification in late June or early July in 2001.
- 4. Alternative marking tools & techniques
  - a. DPM described conclusion of a commercially available single use, pre-loaded, pre-sterilized injector (suplpsi).
  - b. Data has not been analyzed yet should be done next week.
  - c. Anecdotally, workers felt that the suplpsi injectors provided a cleaner incision and required less pressure to create the incision in the fish.
  - d. Certain problems with the popper (traditional) injectors were encountered e.g., dull needles, no tags, extra tags, etc.
- 5. Walkthrough of PITTAG 3 Led by JT
  - a. PSC will contact David Graves to get information about incorporating gps data, utm (uniform transverse mercater), llid or other GIS location identifier, into the PTAGIS database. The results of this information gathering will be posted on the PTSC web page by June 15, 2001.
- 6. Walkthrough of 2001 PIT Tag Specification Document, led by DPM
  - a. For 2002:
    - 1. Replace "Tagging File" with "Tag File".
    - 2. Develop new nomenclature to address adult ladders.

- 3. Eliminate mandatory requirement for all three water temperatures, release date & time, migratory year, tagging method, tag site.
- 4. Committee will address definition of "Organization" in 2002.
- 5. Address how to identify Lamprey as a species.
- 6. Update Capture Method codes.
- b. PTOC will increase the length of the flag code column in the tag\_data table to be 50 characters and then re-load any legacy tagging files that had tagging records with eleven characters or more in the flag code column.
- c. The Committee unanimously agreed to eliminate the "Mortality File" type. The Specifications Document will address what the "Release Date", "Release Location" & "Tag Date" fields mean when a tag record is marked with any of the mortality flag codes. The PTAGIS database will be changed to allow mortality information to be stored correctly. An example will be added to the Spec. Doc.
- d. The Committee unanimously agreed to eliminate the "Release Information File".
- e. EWB pointed out the PTOC has added Tagging Coordinators without the approval of a PTSC member. DPM apologized and agreed to stop adding new Tagging Coordinators unless a PTSC member has approved.
- f. PCS said that he would post a "Tagging Coordinator Change Request" form to use to add, change or delete Tagging Coordinators.
- g. The Committee suggests that www.pittag.org have a glossary of terms.

Meeting ended at 1830 hrs.

Meeting reconvened on Friday 02/02/01 at 0800 hrs

- 7. Agency Marking Plans
  - a. FWP  $\sim$ 700,000 tags
  - b. NMFS
    - 1. Marsh @ Granite ~105,000
    - 2. Muir @ Granite~25,000
    - 3. Lower Monumental project ~20,000 yearling chinook and 20,000 subyearling chinook
    - 4. McNary fall Chinook 40,000
- 8. EFP suggests that the committee recommend that studies be conducted to address shed tags.
  - a. EFP suggested that there would be a laboratory component to the research and a natural stream component. Suggested that the research be conducted in Alaska where there are large numbers of adult returns.
  - b. AS suggested that steelhead should be considered as a study target in addition to Chinook. This would allow research to be conducted on Kelts. Suggested that a project such as Lower Snake River Comp could be a candidate.

- c. CFM suggested that projects in the Yakama Indian Nation may be conducive for this.
- d. EWB questioned whether this issue is appropriate for the PTSC to address.
- 9. EFP discussed miniaturization of tag. Described a matrix that would address decreased performance as tag size declined.
- a. PTSC to discuss within agencies and consider action at another meeting. 10. 2001 SbyC Study Plans
  - a. DPM reiterated that SbyC coordination process is documented at www.pittag.org.
  - b. DPM talked about lessons learned future automation.
    - 1. Gather SbyC user requirements electronically.
    - 2. Translate requirements into appropriate map files.
  - c. DM asked about how frequently the database could be updated.
    - 1. Of the fish collected at Granite, need to bypass 20,000 for survival estimates. Want to bypass those 20,000 at all other sites. Codes for other sites would be updated daily depending upon fish that were bypassed at Granite.
    - 2. Study would begin in June. Gene Mathews is PI. Fish would come from Lyons Ferry.
  - d. DM mentioned that the large salt-water challenge at Bonneville would not be using SbyC this year, but may be taking fish from the sample to put through the flume and systems of the challenge setup. DM would tell PI to coordinate any sample gate changes with PTOC.
  - e. DM mentioned that NMFS would be doing a SbyC study to qualify the head box replacement at Lower Granite. This is already coordinated with DPM. DM mentioned that Achord would be doing a SbyC study at Little Goose.
  - f. DPM suggested that the FPC people would be in touch soon to coordinate SbyC plans for the comparative survival study (CSS).
  - g. U of I (Congleton) will piggyback on CSS study for stress and physiology study.
  - h. Expect to hear from Chris Peery re: his adult separation requirements at Lower Granite and B2A.
- 11. SbyC Gate Calibration Tests
  - a. DPM passed out "PTOC Separation by Code Gate Efficiency Test" which is available on www.pittag.org/Ptoc OM.
  - b. EFP suggested that it might not be appropriate for PSMFC to do this calibration test.
  - c. DM described the initial studies and discussion of by-catch as a policy issue. Need to consider the timing of the work, because there may be bias in the by-catch variable. A one-day snapshot wouldn't provide a very good answer.
  - d. EFP suggests that PTOC contract out fish handling.

- e. AS suggested that PTOC take this to FPAC for approval, and to define whether the priority should be to decrease by-catch or to divert fish. If by-catch is an issue, then at what level?
- f. EFP suggests that PTOC submit proposal for peer review.
- g. DM voiced concern about doing this once during the out migration. It would be best to do this type of thing more continuously through out the season.
- h. SD voiced concern about the statistical reliability based upon the low numbers of fish being proposed.
- i. The committee decided that PCS would take proposal to FPAC and address the issues that DM and the committee raised.
- j. The committee decided that PTOC should submit the proposal for peer statistical review by people like Sandford and Skalski.
- 12. Portable, Stationary & Extended Range Reader Developments
  - a. SC described that the combination battery charger and power supply of the FS2001 system is discontinued. In its place are a separate power supply and/or a separate battery charger.
  - b. SC described improved, over-molded cables for FS2001.
  - c. SC raised the 'warranty issue'. The warranty was for one year. Suggested, and Committee agreed that June 1, 2001 be the conclusion of the warranty period.
  - d. SC said that the NewsLetter should have an article about the lithium battery. If the lithium battery is dead, the reader will start with a "PARAMS RELOADED" message. Should users replace their own lithium batteries or should there be some sort of a replacement process set up.
  - e. EWB suggested that PTOC should send a letter to tag coordinators to replace lithium battery once per year. Note that if the battery goes dead, the reader will erase user parameters, but will also lose any tag codes and/or date and time stamps stored.
  - f. 33 adult transceivers will be shipped by March 20<sup>th</sup>.
- 13. Extended range reader applications with respect to adult reader
  - a. EFP discussed various applications that could utilize the extended range reader configurations, e.g., tiled arrays in streams, arrays of readers in surface bypass collectors.
  - b. PCS described that current CPU board of the Destron Fearing transceiver is at it's processing limit in the Adult ladder applications. Described that upgrading the CPU would overcome the processing limitation in the adult systems.
  - c. EFP suggested that in addition to allowing better reading capability in the adult ladders, it would provide a foundation to increase memory capacity, incorporate digital signal processing and other advantages.
  - d. SC described that other requirements had been identified related to reducing power consumption and providing a rack-mount architecture, etc.
  - e. EWB suggested that a new CPU development project should not compromise the deployment schedule of the adult ladder system.

# 14. Super Tag Update

- a. SC described the tape and reel manufacturing process changes related to the super tag. The antenna is now put onto tape.
- b. The conductive glue technology works.
- c. DF is shopping for a machine to manufacture the tags from the tape and reel components.
- d. Want to put tags into the river next spring 2002. DF is contractually obligated to provide the super tag by 2003.
- e. Super tag is more efficient at poor orientations, and more immune to electromagnetic noise.
- f. Could use this technology to develop a tag that could be inserted using a 14-gauge needle rather than 12. This could shrink the tag down to 9 or 10 millimeters.
- g. DPM described the NMFS Portland request to install PIT tag detection on the 36-inch bypass pipe at McNary.
  - 1. EFP mentioned that NMFS was hoping for Corps funding to install the system.
  - 2. SC suggested that DF is looking at some things in the lab.
- h. DPM suggested that Agencies should view the switch to a super tag similarly to the switch from the 400kHz system to the ISO system.

## 15. Adult Ladder Reading Efficiency Analysis

- a. PCS described two requirements: 1) research requirements to determine Big-P for things like smolt to adult survival ratios and 2) O&M requirements to determine efficiency at a coil, weir and ladder.
- b. Minutes for the Jan 3. meeting along with the Skalski and Clough papers will be distributed by PSC next week.

### 16. Web Interface to Ptagis

- a. PSC described initiation of a new project to re-write the pittag web site.
- b. PSC asked The Committee for their priorities for development of functionality.

### 17. Data Anomalies

- a. PSC described that there are certain data anomalies that will be addressed during the PTAGIS data blackout period. The remaining anomalies that cannot be fixed during that period will be documented in the Newsletter.
- b. PSC announced that PTAGIS would experience a data blackout during the time period between February 21 and February 26, 2001.

# 18. PTOC Water-up

- a. PTOC has installed new interrogation platforms at all PTOC supported interrogation sites.
- b. The Granite Adult Ladder (GRA) is now configured to read both 400kHz tags and ISO tags.
- c. The Bonneville Adult Lab (B2A) will be configured to read both 400kHz and ISO tags in time for U of I sampling there.

## 19. FPAC / Tribal / COE / Other PTSC representation

a. PTSC has been asked to bring issues related to these entities to the FPAC.

b. DPM reiterated that he would direct users to Steering Committee members as required by the PIT Tag Specifications Document.

Meeting adjourned at 1200 hrs