PIT Tag Information System
Columbia Basin

Newsletter

A Fisheries Data Project of the Pacific States Marine Fisheries Commission

IN THIS ISSUE

PTAGIS Job Announcement

JOHN TENNEY (PTAGIS Portland Office)

PTAGIS Job Announcement

Pacific States Marine Fisheries Commission is seeking an experienced Tech Support-Data Management Specialist 2 for the PTAGIS program. The position will be located at our corporate office in Portland, Oregon.

Interested candidates should visit http://www.psmfc.org/Current_PSMFC_Job_Opportunities to review the details and requirements for this position.

APPLY NOW!!
Interested candidates must fill out and complete the online application to be considered for the position. "See Resume" will not be accepted.

Benefits: Med/Den/Vis, Life/LTD/ADD, Medical and Dependent FSA, 125, Pension, PEHP, 457, Optional Aflac, along with paid vacation and sick leave.

PSMFC is an Equal Opportunity Employer
No relocation assistance provided.

BPA PIT Tag Solicitation Coming

SHARON GRANT (Bonneville Power Administration)

Bonneville Power Administration's (BPA) contract for PIT Tag acquisition will be expiring later this year. BPA will be issuing a Request for Proposal (RFP) within the next three months for PIT tags, used in our Columbia Basin Fish and Wildlife Program projects, to replace the current contract.

For the most part, we will be requesting a tag similar to our current 12.48 mm PIT tag (12 to 12.5 mm), but we will also need 8.5 mm tags used in some smaller species and a limited number of 20 to 23 mm tags for larger targets. Those submitting proposals will be asked to submit a quantity of tags for testing purposes, which will provide necessary data to include in determining who will be awarded the contract.

If you wish to receive the RFP when released, please contact Sharon Grant at 503‑230‑5215 or email her at sdgrant@bpa.gov with your contact information. ◉

Mux Firmware 1.9D Problems

ROGER ANDERSON (Destron Fearing)

Destron Fearing has received many calls for RMA's for the FS1001M Multiplexer that state: "Serial port not downloading data correctly". We have physically checked the performance of the serial port along with buffer download functionality and did not find any obvious problems. After customer clarification on the issue and receipt of the data files showing the problem, we figured out what the problem is: the customer is using Application Software version 1.9D. This version was given to only few individuals under the understanding that this is a test version that was not fully verified. More people than we anticipated started to use it thinking that this was a better version.

We have identified an issue with the buffer where tags IDs were getting incorrectly recorded and or manufacturer's codes were getting randomly modified or omitted.

As of today, the officially released version of Multiplexer application software is 1.7. This is the version that everybody should use in order to **maintain the integrity of collected data and, also, manufacturer's warranty**.

These issues along with others identified in versions later than 1.7 will be addressed and fixed in version 2.XX which has been funded and should be released shortly after verification testing is complete. In the meantime be aware that if you are using any version other than 1.7 you could have issues with the integrity of collected data. ⊚

SPECIAL NOTICE: 8.5 mm PIT Tag Production Has Been Delayed

SHARON GRANT (Bonneville Power Administration)

Bonneville Power Administration (BPA) has received notification from our current supplier, Destron Fearing, that the TX1411TXB - 8.5 mm PIT tag production has been delayed.

Those with BPA projects who have requested 8.5 mm tags for the current fiscal year will have the choice of:

1)   Waiting until 8.5mm tags are available for shipment or:

2)   Switching their order to the TX1400SST - 12 mm tag.

If you need more information about your current order status, please contact Sharon Grant, BPA PIT Tag Coordinator (sdgrant@bpa.gov, 503-230-5215). ⊚

Pre-Loaded PIT Tag Program for BPA Projects

SHARON GRANT (Bonneville Power Administration)

As we discussed in the last newsletter, Bonneville Power Administration (BPA) Fish and Wildlife Program has been working with Biomark, Inc. to make pre-loaded 12.48 mm PIT tags available to our projects this year.

BPA will be seeking input later this year from those who have taken advantage of this new program to determine its effectiveness in reducing fish health risks, personnel safety concerns, and cost effectiveness.
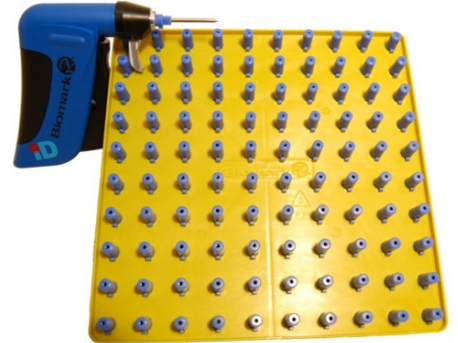
Process for Preloading Tags After Delivery of Regular Tags

For those who already received their tags for the year, but would now like to get them pre-loaded by Biomark, Inc., we have compiled some directives that may help you obtain the tags more expeditiously.

1. Contact your BPA Contracting Officer's Technical Representative (COTR) to determine if sufficient funds are available within your contract budget. This may entail a budget line item transfer or a contract modification to add funds if monies are available at the project level.

2. Contact Biomark (208-275-0011) and request pre-loaded services for a BPA project (include project number). They will advise you of BPA pricing costs for your tags and the turn around time to expect for shipment of your preloaded tags.

3. Send tags to the Biomark offices in Boise, Idaho (703 S. Americana Blvd. Suite 150, Boise, ID 83702). Send full vials of 100 only, tags should be in their original vile; not mixed with tags from other vials. Biomark will then be able to inform PTAGIS which vials of tags have been pre-loaded . That information will be transferred into the database, ensuring the integrity of the data for comparison between preloaded tagging and traditional tagging.

4. Biomark will return the tags and bill the contract directly.

Process for Preloading Tags Before Delivery of Regular Tags

If you have not yet received your forecasted tags this fiscal year, you may still have time to change your order to pre-loaded tags. Follow the directions in Step # 1 as outlined in *Process for Preloading Tags after Delivery of Regular Tags*, to determine funding issues, then go into the PTAGIS Tag Distribution System (TDS) and change your tag type to "12PL" and modify dates as needed and re-enter your shipping address for the new shipment. The system will inform us of your changes so we can process your request, notifying you when the change has been approved.

Preloaded PIT Tag Requests for FY 2011

When forecasting tags for FY 2011 take places in late August through early September, you will be able to order pre-loaded tags directly in TDS, allowing BPA to plan ahead and get your tags pre-loaded as needed.

For further information, please contract BPA's PIT Tag Coordinator, Sharon Grant, at 503-230-5215 or email her at sdgrant@bpa.gov. ☺

Pre-Loaded PIT Tag Implant System is Fully Recyclable

KIRSTYN MCKAY (Biomark Inc.)
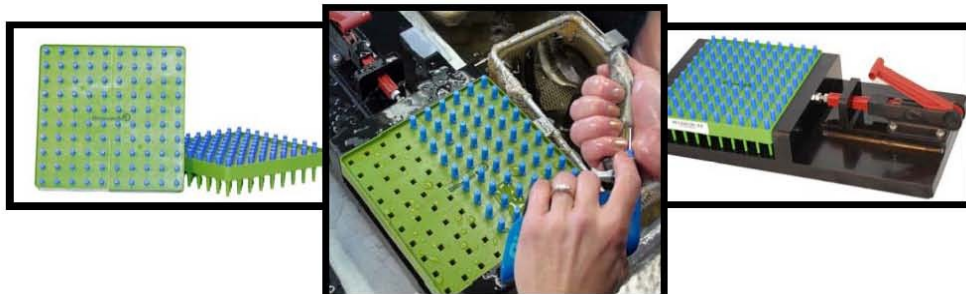
Automated Read Range Tester (ARRT) Progression

Troy Humphrey (PTAGIS Kennewick Field Office)

The prototype version of the Automatic Read Range Tester (ARRT) has been successfully replaced with a production unit. ARRT was developed by PTAGIS Kennewick, as a tool to monitor the health and performance of the Bonneville Corner Collector PIT tag antenna in-lieu of the fact that there is not an upstream or downstream antenna that it can be measured against. The basic concept of ARRT is to quickly insert a tag into the field on an automated interval and capture and record where the tag was read in relation to a fixed baseline. This is referred to as a 'Read Range Test'. The read range test number will either be a positive or negative read range. For example, a read range test result of +4.25 means the tag was read 4.25 inches before it reached the baseline.

The production version of ARRT features several upgrades in hardware and infrastructure. The prototype ARRT featured a stepper motor and linear screw controlled by a Programmable Logic Controller (PLC). The unit would push a tag into the field through a locally developed plastic housing. There were several issues with the reliability of the stepper motor and the structural integrity of the plastic housing. PSMFC explored several solutions and settled on a servo motor drive in place of the stepper motor. The servo motor drive was fitted to an aluminum housing

Around the same time that testing of the aluminum housing and linear drive was taking place; PTAGIS was also mapping the field of the antenna using a newly acquired field strength meter. It was then determined that the field generated by the antenna protruded further from the antenna than initially suspected which then coupled to ARRT. Because of this, PTAGIS approached the USCOE with the possibility of extending the grating down stream so that the aluminum component of ARRT could be moved beyond the reach of the antenna field. The COE came through and had the grating extended in time for PTAGIS to install the new infrastructure prior to water-up for 2010. With the grating extended, a longer plastic housing was needed. Working closely with a plastics manufacturer, PTAGIS produced a robust housing set which was installed by PTAGIS just prior to water-up.

The final component to complete the system was software to automatically tell the PLC when the tag was read. Read range tests on the prototype unit were performed manually by slowly walking the tag into the field while watching for the tag on MiniMon. This was solved by the first release of a M4 Beta that has been specifically modified to communicate with the PLC when a specific tag is read. Testing was conducted in the PTAGIS Kennewick lab with optimizations made by the PTAGIS software engineer. PTAGIS successfully deployed this version of M4 and it is now being used in conjunction with the PLC to collect read range data. With this new software we are able to run the tag in and out of the field at full speed which provides a more realistic read range test. The release of this version of M4 has allowed the original concept of ARRT to come to fruition.
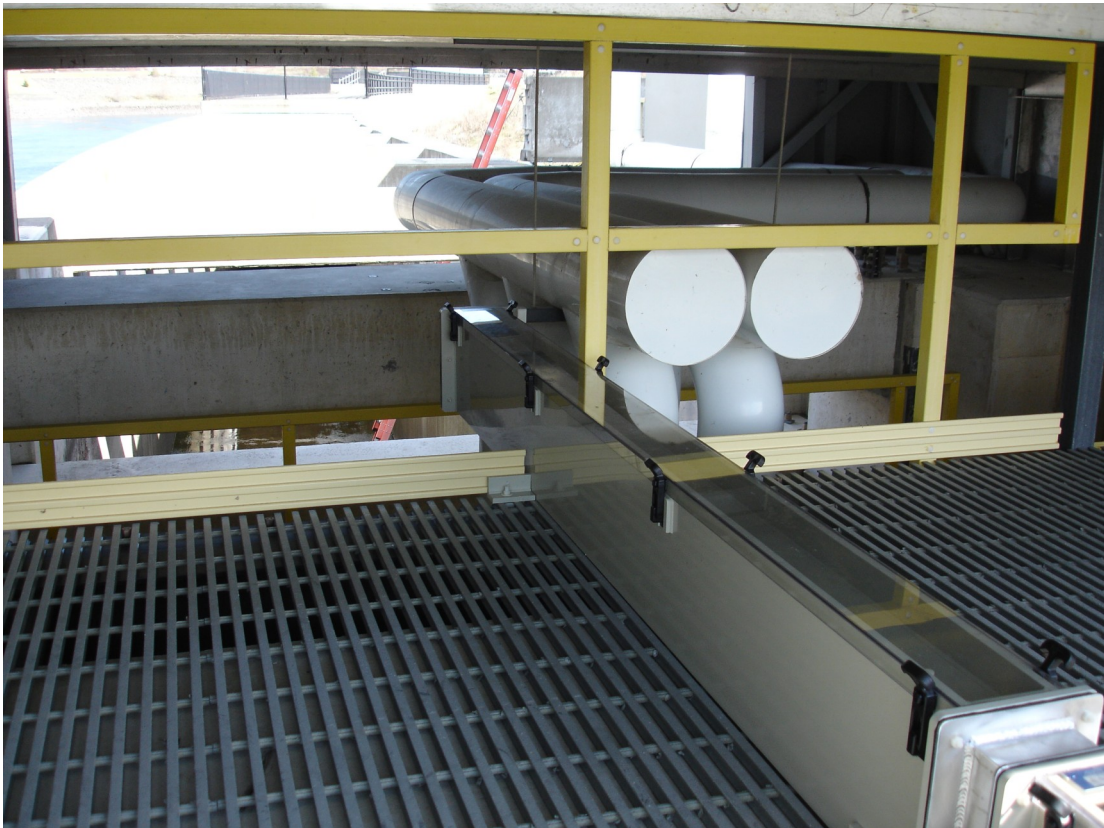
Figure 1. Upstream view of ARRT showing metal and plastic housing.

Figure 2. Upstream view of ARRT