



New PIT Tag System Transition Plan

Federal, state and Tribal agencies involved in the Columbia River Basin anadromous fish mitigation program are considering replacement of the PIT tag interrogation system currently operating in the Columbia and Snake rivers. The current 400 kHz system is aging. Within the next five years, replacement parts will become increasingly difficult to locate and the current PIT tag interrogation system will become obsolete. The existing system could be re-engineered and the present infrastructure maintained for a few years, but it seems to make more sense to transition to the new international standard for identification of animals, as defined by the International Standards Organization (ISO) in document numbers 11784 and 11785. This means acquiring and deploying new stationary and portable interrogation

equipment and new PIT tags throughout the Basin. The new ISO based system would operate at a frequency of 134.2 kHz.

A draft project management plan is being prepared in order to guide implementation of, or “transition” to, the ISO standard PIT tag and a compatible transceiver system within the Columbia River Basin in time for the 1999 juvenile salmonid outmigration. The draft project management plan will describe the steps needed to accomplish deployment of a new system. It is intended to establish processes for a “transition planning team” to meet, develop plan options, and provide status reports on the progress of each element.

Five main elements of the project have been identified:

1. Selection of a stationary transceiver;
2. Selection of a suitable ISO tag;
3. Selection of a portable transceiver;
4. Infrastructure modifications; and
5. Deployment.

Efforts are underway to develop a management process to successfully carry out this effort. Additional details of this project and process will be in the next issue of the *PTAGIS Newsletter*.

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Interrogation Data Anomalies: Orphans

What is an orphan?

In the PTAGIS system, the term “orphan” refers to an interrogation record that has no matching tagging record.

The ability to track “orphans” was implemented in 1995 with the introduction of the new, high speed, bulk data loader process. As each interrogation record is processed, the tag_data data table is searched to determine whether or not the tag_code associated with the interrogation has been reported. If a tag_record is found, the loader process continues, otherwise a tag_data record is created with the file_id of “ORPHAN” and values of “DUMMY” in other columns (see Figure 2).

There are two instances when an orphan can be created:

1. When the interrogation of a code generates a mis-read (See *PTAGIS Newsletter* Volume 7, November 1996 for additional details), or
2. When a Tag Coordinator does not send the Tagging File with the PIT code of the fish that carried the tag that generated the interrogation record. In this instance, the orphan tag_data record will be removed when the PIT code is submitted in a Tagging File.

Orphan Case Study Example

Under Tables, select Tagged Fish List. Type in “ORPHAN” under Tag File, and run the report. This will generate a listing of all orphan tag codes in the PTAGIS database. Figure 1 shows a partial listing of these records.

In this example, Tag ID “017041110C” was selected, and an “Old One Fish History” query was run.

The resulting information (shown in Figure 2) seems to indicate a mis-read tag code, due to the fact that there is only one coil reading at GOJ. Please refer to the last issue of the *PTAGIS Newsletter* for additional information on how to check for mis-read tag codes.

What Has Been Done?

Beginning in 1997, we will define an automated process to notify Tag Coordinators when a certain number of orphan records are generated. This process will track the PIT code to the tag distribution event.

Summary

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Figure 1

Migr	Tag File	Tag Id	Rel_w_time	Seq	Sp	Run	RT	Bnd	Ut	L
	ORPHAN	016C793F0F	01-Jan-1988 12:00:00							
	ORPHAN	016D36605A	01-Jan-1988 12:00:00							
	ORPHAN	0170232043	01-Jan-1988 12:00:00							
	ORPHAN	0170255200	01-Jan-1988 12:00:00							
	ORPHAN	017041110C	01-Jan-1988 12:00:00							
	ORPHAN	0170422000	01-Jan-1988 12:00:00							
	ORPHAN	0177795000	01-Jan-1988 12:00:00							
	ORPHAN	0177796F41	01-Jan-1988 12:00:00							
	ORPHAN	0178377070	01-Jan-1988 12:00:00							
	ORPHAN	01786F7F78	01-Jan-1988 12:00:00							
	ORPHAN	017D037D77	01-Jan-1988 12:00:00							
	ORPHAN	017D35706A	01-Jan-1988 12:00:00							
	ORPHAN	017D47200F	01-Jan-1988 12:00:00							
	ORPHAN	017D4C2113	01-Jan-1988 12:00:00							
	ORPHAN	017D6F7777	01-Jan-1988 12:00:00							
	ORPHAN	017D787770	01-Jan-1988 12:00:00							

Figure 2

Tag Id:	017041110C	Tag File:	ORPHAN	Migr Yr:	
Species:		Tag Site:	DUMMY	Ovg:	PTAGIS
Run:		Tag Date:	01-Jan-1988	Hatchery:	DUMMY
Rear Type:		Coord Id:	PCS	Receiv:	DUMMY
Seq No:		Capt Meth:	DUMMY	Assoc Mark:	
Length:		Tag Meth:	NONE	Flags:	
Height:		Tag Temp:		Stock:	DUMMY
Red Vr:		Water Temp:		Mort Flag:	
Tag Rem:					
Series:					
Rel File:	ORPHAN	Rel Date:	01-Jan-2188	Transp Type:	
Rel Site:	DUMMY	Rel Temp:		Transp Bur:	
River No:				Riv Reach:	

Site	Obs Date	First Obs	Contr	Coil1	Coil2	Coil3	Coil4
GOJ	03-may-1996 20:46:49		36	58			

New Tag Data Summary Report Available On-line

A new Tag Data Summary Report has been created and is now available on PSMFC's web site. Once you are on PSMFC's Home Page, select the following options: PROJECTS > PTAGIS > PTAGIS O&M > TAGGING LOAD SUMMARY. If you would like to go directly to the report (shown in Figure 3), it can be found at the following address: http://www.psmfc.org/pittag/field_load/tag_load_sum.html.

The report data is split into the following groupings:

1. Total number of files and records processed on the previous day;
2. Load summary;
3. Tagging species load summary;
4. Recapture species load summary; and
5. Mortality species load summary.

At the bottom of the page is a button which allows the user to view a table of record level details about each tag file. From this table (shown in Figure 4), the user can view data by file name. A history of tag data load summaries is also available for viewing.

Please feel free to provide any feedback or comments you may have on this report to Jennifer Mead at PSMFC. Her telephone number is (503) 650-5400, or she can be reached via e-mail at "jen@psmfc.org".

In our next newsletter, we will provide you with more information about this and other pages for mortality and release counts.

Figure 3

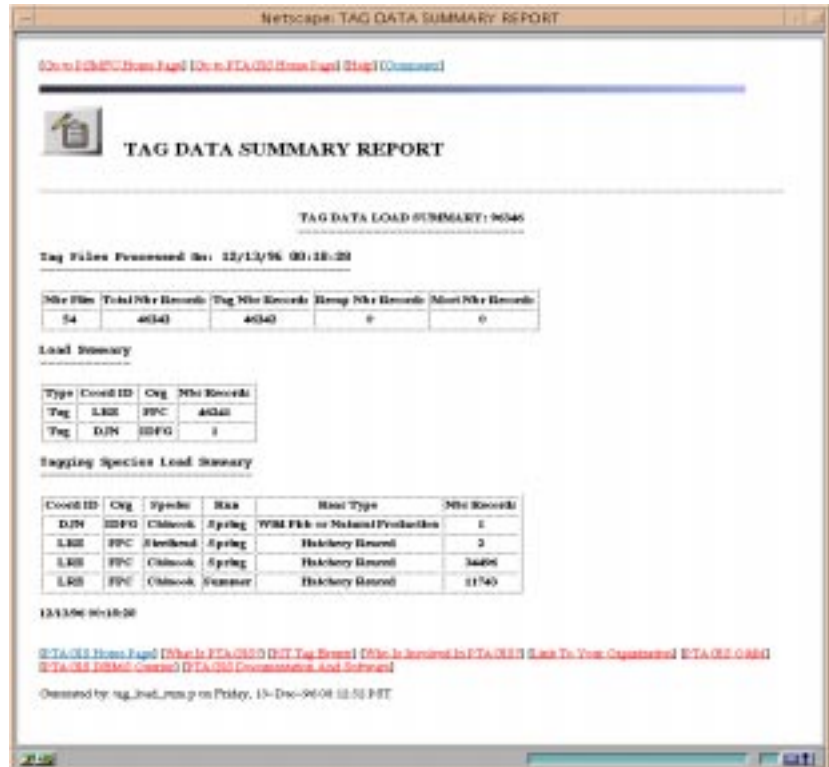
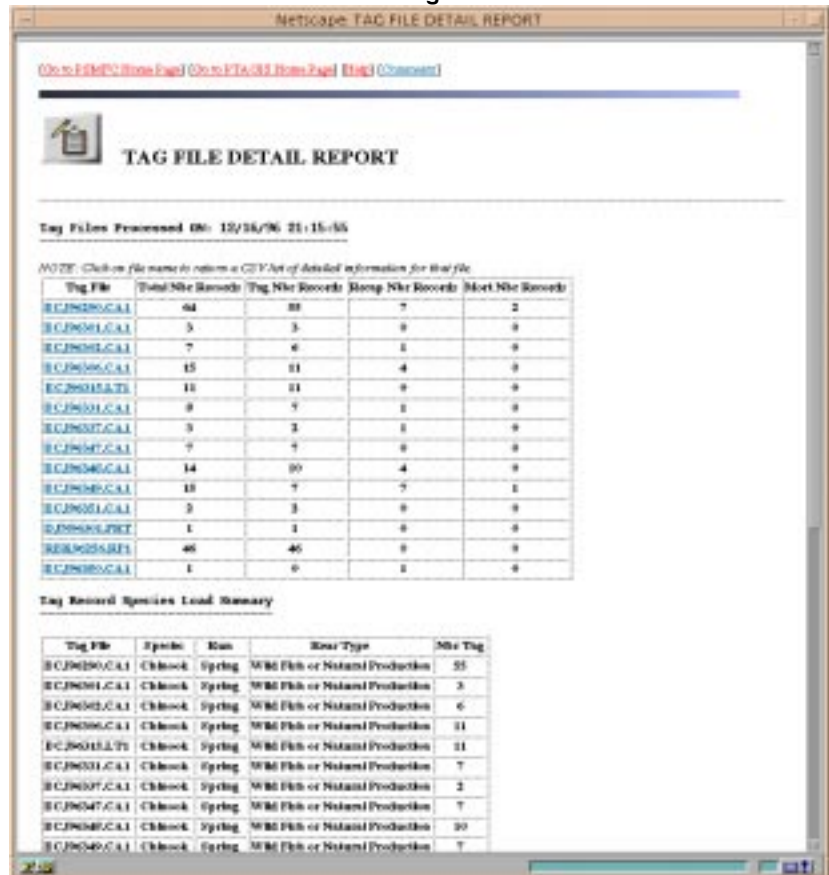


Figure 4



Announcements:

The Staff of the Pacific States Marine Fisheries Commission wishes you and your family a happy, healthy holiday season!

Visit PTAGIS at
www.psmfc.org/ptagis

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Calendar 1997

Now - Jan. 15	Call for Changes to the PIT Tag Specification Document
Feb. 1	1997 PIT Tag Specification Document Published
March	Separation by Code Workshop (Date and Location TBD)