

MEMBER STATES

ALASKA  
CALIFORNIA  
IDAHO  
OREGON  
WASHINGTON

PACIFIC MARINE FISHERIES COMMISSION

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PORTLAND, OR 97201  
PHONE (503) 229-5840

EXECUTIVE DIRECTOR  
LAWRENCE D. SIX  
TREASURER  
G. L. FISHER

June 27, 1984

TO: Tag Coordinators  
FROM: Ken Johnson, Regional Mark Processing Center *Ken*  
SUBJECT: Mid-Year Reporting of CWT Releases

Attached is a form to report your Agency's CWT releases for the first six months of 1984. A computer listing would also be acceptable.

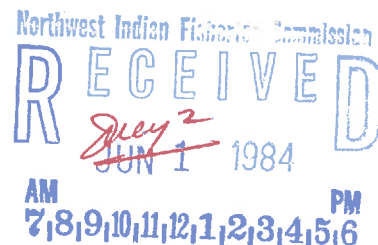
Please be certain to note binary half length tag codes with the appropriate letter preface, i.e. "H" for the old series and "B" for the new series. Rare earth tag codes should be listed with upper case-lower case letters (e.g. Sm = Samarium).

The report should be forwarded to me by July 27 in order that I might commence in processing it during the first week of August. Your assistance will be greatly appreciated as always!

Also note that you are welcomed to forward all release data for those tag codes which are now known to have finalized data. This would be a help to me, since it would reduce the log jam I typically experience every January-February in processing CWT release data and fin mark data. Should you decide to do this, please use the standard full-length report form.

JKJ:mmd

Attachment: Mid-Year CWT Release Report









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PACIFIC MARINE FISHERIES COMMISSION

528 S.W. MILL STREET  
PORTLAND, OREGON 97201  
PHONE (503) 229-5840

M E M O R A N D U M

23 January, 1984

Northwest Indian Fisheries Commission  
**R E C E I V E D**  
JAN 25 1984  
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

TO: Recipients of 1979 CWT Recovery Report  
FROM: Ken Johnson, Regional Mark Processing Center *Ken*  
SUBJECT: 1979 California Troll Recoveries

This is to advise you that the 1979 Pacific Salmonid Coded-wire Tag Recoveries report was forwarded under separate cover last Friday (January 20) and should be arriving soon.

Please note that California's commercial troll recoveries are missing. These data are now being finalized by CDFG. When they are available for distribution, the Season Summary section will also be updated and distributed as a replacement to the incomplete summary now available at the end of the report.

On the basis of current progress by recovery agencies, the 1980 recovery report should be ready for distribution by May or June. Alaska, Washington, and NMFS-Seattle data are now available in final form. Oregon and California data are expected to be completed by May.

It is also anticipated that the 1981 recovery report (and possibly a partial 1982 report) will be distributed by the end of 1984.

JKJ:fec

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# PACIFIC MARINE FISHERIES COMMISSION

528 S.W. MILL STREET  
PORTLAND, OREGON 97201  
PHONE (503) 229-5840

Northwest Indian Fisheries Commission

RECEIVED

DEC 30 1983

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

## MEMORANDUM

DATE: 27 December, 1983  
TO: Committee on Anadromous Fish Marking and Tagging;  
General Distribution  
FROM: Ken Johnson, Regional Mark Coordinator  
SUBJECT: 1984 Mark Meeting

### A. Meeting Time and Place

The 1984 Mark Meeting has been scheduled for Wednesday, February 15, from 9 AM to 4 PM. It will be held in the Commission Room of the Oregon Department of Fish and Wildlife Building, 506 S.W. Mill Street, in Portland.

The Portland Motor Hotel (503-221-1611) is located within three blocks and recommended for those requiring overnight lodging.

### B. Preliminary Agenda

The enclosed agenda outlines a busy day for the Committee. Please carefully review the attachments and information provided below so that we can effectively move over the considerable breadth of topics. Most agenda items can be handled quickly if prior preparations have been made.

#### 1. Update on 1983 High Seas Sampling Program

Alex Wertheimer (NMFS-Alaska) will report on 1983 high seas tag recoveries and new range extensions into the western Pacific. An update will be given on the status of the request that U.S. observers on the Japanese motherships be permitted to transfer to catcher boats periodically to sample the incidental steelhead catch for tags before the fish are thrown overboard.

#### 2. Review of Adipose Clip Policy for Columbia Basin Steelhead and Coastwide Considerations

The recent action taken in October by Idaho, Oregon and Washington to de-sequester the Adipose clip for Columbia Basin steelhead needs to be reviewed and endorsed by the Mark Committee as a whole. This applies equally to the sequestering of the LV as the replacement flag for coded-wire tagged steelhead originating from the Columbia Basin.

*in my mind detector with de-sequester might be flags*

*Corrigan*

It has also been requested that the Committee discuss whether or not the LV sequester should be extended coastwide for uniformity in the policy. Things to consider include:

- a) The LV could not be used under any condition without a CWT;
- b) British Columbia and NMFS (U.S. Observer Program) are the only agencies having an ocean sampling program that includes looking for tagged steelhead;
- c) If adopted, the change would not preclude the continued use of the adipose with a CWT. BCFW, for example, now marks all winter steelhead stocks with the Ad-only mark and all summer stocks with the Ad + CWT mark;
- d) Do the advantages (e.g. uniform flag for CWT) outweigh the disadvantages (e.g. probable higher marking mortality, more difficult to sample)?

Regardless of the option selected, it will remain imperative that all applications of the Ad only, LV, and other marks be correlated with the RMPC and other agencies prior to marking in order to avoid conflicting uses of the given mark.

### 3. Request to Re-Use Half Length Tags on Alaskan Pink Salmon

Attached are two letters from Dr. William Smoker (University of Alaska, Juneau). Attachment 1 describes his multi-year genetic study of Alaskan pink salmon using half length binary codes. A total of 60 codes were used in 1983. Another 120 codes are needed in 1984 and again in 1985. At this rate, the entire series for agency code B0 (Alaska) will be exhausted before the study is completed.

Given that there is no other ocean recovery program for pinks in SE Alaska and that only one brood year is present in the ocean at any given time, Smoker has requested that an exception be granted to re-use many of these tag codes. This would sharply reduce the number of required codes and yield a savings of approximately \$7000 each year.

An alternative proposal (Attachment 2) would be to desquester the Ad clip for wire tagging of pink salmon for several years. This could be limited to Alaska or the entire coast as the Committee saw fit. In either case, it would mean that tag recoveries would not be reported.

From the RMPC perspective, either re-use of codes or desequestering the Ad clip would be acceptable since there is no regional tagging and recovery effort for managing pink stocks.



09  
Committee

4. Proposal to change Mark Meeting to Early Fall

The Mark Meeting has been customarily held in January or February because these months are usually "slow" for fisheries work. However, several situations have arisen over the past few years in which an earlier decision by the Mark Committee was needed. Idaho's request to de-sequester the Ad clip on steelhead in the Columbia is one of three requests that required early action this year. Often the need has been to commence marking fish early in the fall as soon as the fish are large enough.

It is proposed therefore that the Committee consider the merits of rescheduling the annual Mark Meeting to September or October. While this period is much busier, the meeting lasts only one day and decisions can be implemented promptly in the fall.

5. Report on Coastwide Tagging Plan Study

Roy Wahle (formerly NMFS-Portland) was awarded a contract to develop a coastwide tagging plan to improve fishery management. He will report on progress to date in the areas of:

- a) identification of representative stocks/management units; *need tribal input - when met & see draft of plan*
- b) description of current tagging efforts;
- c) identification of future tagging needs;
- d) identification of fishery management problems that can be met by CWTs or alternative marking approaches;

6. Report on CWT Statistical Research *when committee meet*

Frank de Libero (WDF/PMFC) will report on progress to date in analyzing the existing CWT data base. Preliminary conclusions will be presented. A brood year report of observed and estimated recoveries of chinook (1971-77 broods) and coho (1971-78 broods) also will be discussed. A limited number of copies should be available.

7. Commitment Needed to Establish New Historical CWT Recovery Data Base

*OK*

At the present time, the only regional data base available for pre-1977 tag recoveries is that maintained by WDF. The Mark Center's data base commences in 1977, the year it was established. In the course of de Libero's work, however, he found that a significant number of the records had been revised by WDF because of different pooling procedures. For example, Alaska's nine reported statistical areas were pooled into four areas, thus generating new expansion factors and tag estimates.

While these revisions are appropriate for WDF's internal analysis purposes, it means that an unrevised historical data base is not available. Therefore discussion will center on means to reproduce the original agency versions of pre-1977 recoveries for submission to the RMPC.

8. Need to Standardize Hatchery and Release Sites Names for CWT Release Data Base

Individuals using the CWT release data base have experienced some problems in sorting releases by hatchery sites and release sites because the names submitted on the data sheets often vary from year to year. Therefore, lists of the names used for each agency's hatcheries and release sites will be distributed to each tag coordinator for editing. The goal will be to develop a standardized regional listing that can be distributed to all tag coordinators.

9. Identification of Key Elements Needed in CWT Documentary Data Base

One of the key recommendations of the 1982 CWT workshops was that a regional documentary data base be developed for all CWT studies. It was envisioned that this data base would include information on rearing conditions, disease history, nature of the tagged release group (i.e., production or experimental), accurate description of the fish represented, etc.

WDF has maintained a documentary data base for their release groups for several years now. More recently, USFWS has completed work on a more extensive data set that includes all phases of hatchery production from spawning to release. Agency reports will be presented by Lee Blankenship (WDF) and Richard Comstock (USFWS), with the intent to help identify those data elements which are essential to a regional data base.

To facilitate discussion, please give serious consideration to data elements that you feel are necessary but presently lacking in the existing CWT release and recovery data sets.

10. Update on Advances in Microtag Technology

a. Passive Integrated Transponder (PIT) Tags

Earl Prentice (NMFS-Seattle) will provide an update on the PIT tag which has recently been reduced in size to 0.16" length by 0.06" diameter. The 32 bit silicon chip used in the tags has a potential of 4.3 billion unique codes. Preliminary experimental results on tag placement, tag loss, and tag detection will be presented.

*Does Idaho have a third alternative for PIT tags? data mostly out of memory*

*OM*

While still substantially larger than binary tags, the micro-sized PIT tag now has the potential of becoming a valuable tool for marking fish. Therefore, in order that progress might proceed in an orderly fashion, the Mark Committee will need to consider how PIT tags will impact current recovery operations and data processing. Questions that need to be considered include:

- 1) What sites are suitable for tag implantation?
- 2) What level of tag shedding is acceptable?
- 3) Is an external flag required, and if so, should it be the adipose clip?
- 4) Are agencies willing to modify sampling routines to sample for PIT tags?
- ✗ 5) Assuming local applications (e.g. returns to hatchery), will be tested first, at what point should recoveries be reported to the RMPC for inclusion into the regional data base?
- 6) How will the 9 digit tag code impact current data processing routines designed for 6 digit tag codes?
- 7) How will the use of unique codes for each fish affect data processing? For example, the tag code for a given release of fish is now the unifying data element for analyzing recoveries (such as sorting or totaling by fishery, area, or time).
- 8) Other?

b. Binary Coded-Wire Tags

Dr. Keith Jefferts (Northwest Marine Technology) will report on a new wire with magnetic properties that eliminate tag detection problems now experienced with half-length tags. Updates also will be provided on x-ray readable tags and ongoing research on tag detection systems designed for conveyor belt applications.

11. Revised Format Proposed for the Mark List

OK  
The Mark List, as presently published, can be a very misleading document since it includes both proposed and actual fin mark releases. Many of these marks were either not used or significantly modified without the changes being reported. As a result, Canada has recommended that the Mark List be converted to the same format as the CWT Release Report where only the prior year's actual release numbers are added to the report.

This suggestion could work very well since a list of new fin mark requests is prepared and distributed to all tag coordinators prior to the Mark Meeting. Hence, that list (or a revised list following the Mark Meeting) could serve for planning the subsequent year's fin mark releases. I personally endorse the recommendation and have never appreciated the poor quality of data now in the Mark List.

12. Fin Mark Allocations for 1984

A listing of 1984 fin mark requests will be distributed to tag coordinators in late January. Please review the list carefully in order that any necessary coordination can be done prior to the Mark Meeting.

JKJ:fec

Enclosure: Preliminary Agenda, 1984 Mark Meeting

Attachments: 1) William Smoker's letter to PMFC, 9/1/83  
2) William Smoker's letter to PMFC, 10/3/83

*add. talk to  
coordinators*

THE  
UNIVERSITY  
OF ALASKA,  
JUNEAU

ATTACHMENT 1

SCHOOL OF FISHERIES AND SCIENCE

11120 GLACIER HIGHWAY  
JUNEAU, ALASKA 99801  
907-789-2101

September 1, 1983

Ken Johnson  
Regional Mark Coordinator  
Pacific Marine Fisheries Commission  
528 SW Mill St  
Portland, Ore. 97201

Dear Ken,

Thanks for your advice about our pink salmon tagging yesterday on the phone. I realize now that what I am proposing amounts to reusing tag codes, a practice that has been discouraged; since you think it may be a reasonable request, I'm formalizing it in this letter.

The project is a quantitative genetic study of pink salmon, Drs. Gharrett, Stekoll, and I are the principal investigators. Its design calls for a maximum number of sibling groups of fry released, even if the expected number of adults in each group is small. In each experiment we are releasing 60 sibling groups; last year we achieved about 300 fry per group, in future we plan about 1000. If you would like more information about the design I'd be happy to supply it. We plan two experiments next year and two the following year, in all 300 sibling groups of fry. There is no practical reason not to reuse codes from our point of view; if we could do so our total need for codes would be 120 groups, if not we need 300.

I think reuse would be reasonable. There is no other recovery effort for ad-clipped pinks in southeast Alaska. Any pink recovered on the high seas would be unambiguously identified because there are members of only one brood year present on the high seas at a given time. Our fish will be recovered at the Auke Bay Lab's weir and probably at no other location. There are limits to the number of half-length codes available and if we can reuse codes we won't need to use such a large portion of the possible codes.

Sincerely,



William W. Smoker  
Assistant Professor of Fisheries

THE  
UNIVERSITY  
OF ALASKA,  
JUNEAU

SCHOOL OF FISHERIES AND SCIENCE

11120 GLACIER HIGHWAY  
JUNEAU, ALASKA 99801  
907-789-2101

October 3, 1983

Ken Johnson  
Regional Mark Coordinator  
Pacific Marine Fisheries Commission  
528 SW Mill St.  
Portland, Ore. 97201

Dear Ken,

Thanks for your call today about my request to re-use codes in half length tags in pink salmon. I hope the committee will be in favor of the request at their meeting in February. An alternative that we did not discuss but which may be acceptable to the committee if they are reluctant to make precedent for the re-using codes would be not to sequester the adipose clip mark for wire tagging of pink salmon. Under this scheme wire tags in pink salmon would not be reported. This would make sense because wire tags are not used for management of pink stocks and no one canvasses harvests for adipose clips. If wire tags are used for management of pink stocks in the future it is likely that magnetic detectors will be used to identify marked fish. We would not be able to use magnetic detectors ourselves because we need to sort living fish.

If neither proposal, re-using codes or removing restrictions on adipose clips in pink salmon, is acceptable there will be two consequences for us. It will cost about \$7000 more to run the experiments this year and we will have difficulty finding enough codes to conduct our 1984 brood year experiments.

Sincerely,



William W. Smoker  
Assistant Professor of Fisheries

Pacific Marine Fisheries Commission

1984 Mark Meeting

Commission Room  
Oregon Department of Fish and Wildlife  
506 S.W. Mill Street  
Portland, Oregon

February 15, 1984  
9:00 AM - 4:00 PM

Preliminary Agenda

1. Update on 1983 high seas sampling program (Alex Wertheimer, NMFS-Alaska)
2. Review of adipose clip policy for Columbia Basin steelhead and coastwide considerations
3. Request to re-use half-length tag codes on Alaskan pink salmon
4. Proposal to change mark meeting to early fall
5. Report on coastwide tagging plan study (Roy Wahle, PMFC)
6. Report on CWT statistical research (Frank de Libero, PMFC/WDF)
7. Commitment needed to establish new historical CWT recovery data base
8. Need to standardize hatchery names for CWT release data base
9. Identification of key elements needed in regional CWT documentary data base (Lee Blankenship, WDF; Richard Comstock, USFWS)
10. Update on advances in microtag technology
  - a. Passive integrated transponder (PIT) tags (Earl Prentice, NMFS-Seattle)
  - b. Binary coded-wire tags (Keith Jefferts, NWMT)
11. Revised format proposed for Mark List
12. Fin mark allocations for 1984







# Northwest Indian Fisheries Commission

February 17, 1984

TO: Committee on Anadromous Fish Marking and Tagging

SUBJECT: Hatchery name reconciliation and request for area of origin assignment.

Coupled with the PMFC efforts to clean up the data base by eliminating errors and inconsistencies in hatchery names, it would be very helpful to the NWIFC if you would describe areas of origin and assign each unique hatchery name to an area.

This information is necessary as input to a program which is available to anyone with access to the University of Washington's Cyber Computer. This program allows access to a file of PMFC tag release data with the following output:

1. Provide the full details on CWT release groups bearing tag codes entered by the User, or
2. Provide a full listing of all release groups from a specific area of origin.

This program, which was developed by Dr. William G. Clark, is currently being updated and maintained by NWIFC.

I am proposing to use the attached system and area of origin description. Please make any changes you think are appropriate. At present this program provides a quick way to pull/sort CWT release data but does not require a super-sophisticated area of origin breakout. Please provide a completed version of this area of origin breakout for your area with the listing of Unique Hatchery Names requested by Ken Johnson.

Thank you for your assistance.

Sincerely,

*Terry E. Wright*

TERRY E. WRIGHT  
Fishery Biologist

TEW:sm



PLEASE LIST ALL UNIQUE HATCHERY NAMES WITHIN EACH SUBUNIT

10 California

- 11 S. of Klamath River
- 12 Klamath River and North

20 Oregon Coastal

- 21 Oregon aquaculture
- 22 Other Oregon coastal

30 Columbia River

- 31 WA. side below Bonneville Dam
- 32 OR. side below Bonneville Dam
- 33 Bonneville Dam to McNary Dam
- 34 Snake River
- 35 Col. River above McNary Dam

40 Washington Coastal

- 41 S. WA. Coast
- 42 N. WA. Coast

50 Puget Sound

- 51 Strait of Juan de Fuca
- 52 Nooksack/Samish
- 53 Skagit
- 54 Stillaguamish/Snohomish
- 55 Mid Puget Sound
- 56 South Puget Sound
- 57 Hood Canal

60 British Columbia

- 61 Fraser River
- 62 Georgia Strait
- 63 Inside N. of Campbell R.
- 64 Vancouver Island Coastal
- 65 N. of Vancouver Island

70 Alaska

- 71 S.E. Alaska (S. of ?)
- 72 Gulf of Alaska (between ? & ?)
- 73 Bering Sea
- 74 Aleutian Chain ?



COMMITTEE ON ANADROMOUS FISH MARKING AND TAGGING

1983

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# Northwest Indian Fisheries Commission

February 17, 1984

Mr. Ken Johnson  
Pacific Marine Fisheries Commission  
528 S.W. Mill Street  
Portland, Oregon 97201

Dear Ken:

I have received your memorandum of February 13, 1984 approving tribal representation on the CWT Statistical Committee provided that the selected individual has had adequate training in statistical theory and application. I am happy to inform you that Ken Newman of the NWIFC staff will be the tribal representative to this committee. I am enclosing his resume for your information.

It would be appreciated if you could supply some further information about this committee. First, are there any documents describing the purpose and/or goals of this committee. Second, it would be useful if Ken had information on committee work to date. We received your recent mailing of minutes of the November meeting, but we have no minutes or results from the July meeting. Also, if you could let us know when the next committee meeting is tentatively scheduled.

Thanks again for your assistance in this matter. We are looking forward to active participation.

Sincerely,

*Terry E. Wright*  
TERRY E. WRIGHT  
Fishery Biologist

TEW:sm

