IP 3

PACFIIC ALBACORE REPRODCUTIVE BIOLOGY SAMPLING INSTRUCTIONS

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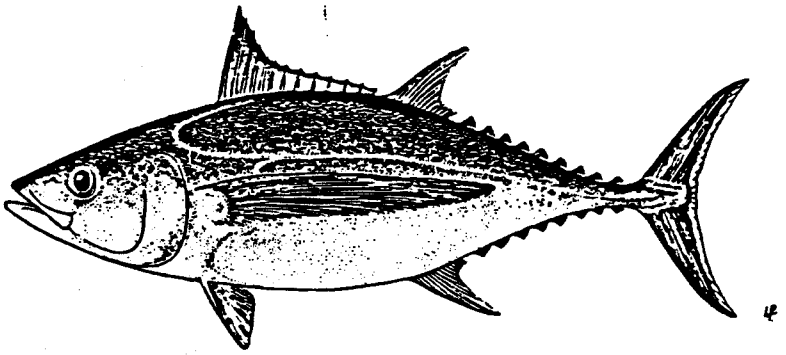

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PACIFIC ALBACORE REPRODUCTIVE BIOLOGY SAMPLING INSTRUCTIONS

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The Southwest Fisheries Science Center and other cooperating institutions are examining the reproductive dynamics of the Pacific albacore population, building on previous scientific studies. These instructions cover sample design and collection of samples from longline fishing vessels.

1. OBJECTIVES

The objectives of this study are 1. to determine the spatial-time distribution of spawning throughout the Pacific, and 2. to determine the spawning frequency and batch fecundity within the spawning season.

The first objective is addressed by these sampling instructions. The second objective is being addressed for the south Pacific by a complimentary study and sampling design described in the South Pacific Commission Tuna and Billfish Assessment Programme Internal Report No. 17.

2. SAMPLE DESIGN

Each month, gonads from 5 adult female albacore should be collected from as many different areas throughout the Pacific as possible. Samples should be collected as described below.

3. SAMPLING PROCEDURE

During each month 5 female albacore greater that 80 cm fork length should be selected by each participating vessel. Required data can be reported on the Albacore Gonad Sampling Form provided.

Female gonads (ovaries) are round in cross-section, orange in color, have many visible blood vessels and may have visible eggs. In larger females, the gonads can occupy a large space in the gut cavity. In comparison, male gonads are triangular in cross-section, are white and do not occupy such a large space in the gut cavity.

Starting with a new form, begin by filling in the blanks at the top of the sampling form. Note the VESSEL NAME, DATE, LOCATION of sampling, and an AREA description if desired.

Next, for each fish, in succession:

* measure and record the FORK LENGTH to the nearest cm (tip of lower jaw to fork in tail) by laying the fish on the tape measure (provided).

* remove and place both ovaries in a plastic bag (provided).

* label and place a tag in the plastic bag with the DATE and SAMPLE NUMBER (matching the line number on the data form - 1 for the first fish, 2 for the second, etc.)

* seal the bag with the sample and tag and place the bag in the plastic bucket (provided).

* repeat this sequence for all 5 fish

Finally, place the completed Albacore Gonad Sampling Form in the plastic bucket and affix the lid and freeze the bucket and samples.

The sampling for the month is now complete. Repeat this procedure during the next month with a new form. Please, DO NOT THAW THE FROZEN SAMPLES.

4. SUPPLIES

The following supplies are included in the sampling kit:

1 - 5 gallon resealable plastic bucket
1 - 200 cm tape measure
50 - sealable plastic sample bags
50 - sample tags
5 - Albacore Reproductive Biology Sampling Forms
1 - soft lead pencil
1 - copy of these instructions

5. RETURN OF SAMPLES

Return the frozen, sealed plastic bucket to a port sampler when arriving in port. Please DO NOT ALLOW THE SAMPLES TO THAW.

THANK YOU for you cooperation in this scientific experiment.

For additional information contact:

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Albacore Reproductive Biology Sampling Form (Longline)

Vessel Name: _____ Area: _____

DATE

Month ⌊__⌋ Day ⌊__⌋ Year ⌊__⌋

POSITION OF SAMPLE

Latitude ⌊__⌋° ⌊__⌋' **N/S**

Longitude ⌊__⌋° ⌊__⌋' **E/W**

Sample Number	Fork Length (cm)	Estimated Weight (kg)	REMARKS
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			