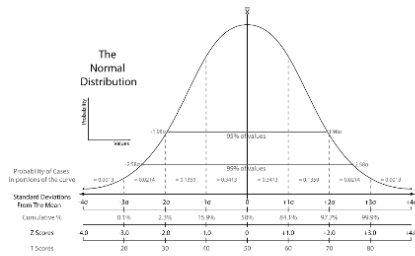
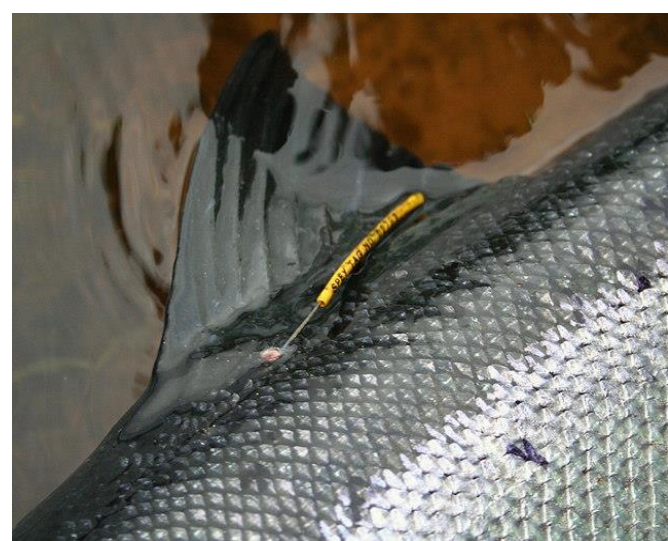


FT 211 Fisheries Management Techniques



Introduction



Home



Presentations



Readings



Video
Resources

Fisheries Technology

When viewing recorded lectures, the slides will automatically advance until the end of a section. The Prev and Next buttons are available but it is recommended you listen and view the recorded lectures in auto mode. You can return to the main menu of the recorded lectures by tapping the presentations icon above.

At the end of each of the objectives there are self-check quizzes to make sure that you understand the basic student learning outcomes for each area.



If you see this icon, there is no audio on the slide.



Fisheries Technology

To access readings, return to your iPad's home menu, and open iBooks. You can identify it by looking for this logo.

For this lecture, please read:





1. Your Instructor

Be familiar with your instructor's background and education relevant to fisheries techniques

2. About the Course

Be familiar with the course layout, syllabus, and what is expected of you

3. Texts

Be familiar with the texts that will be used in this course

4. Course Outline

Know the general course breakdown and topics to be covered

5. Applications of the Course

Know how you will be able to apply the information gained in this course to fisheries management and science.

A vertical stack of five fish-related icons: a fish, a shell, a fish, a crab, and a fish.

Fisheries Technology

This module will cover:

- **Introduction**
- **Layout & Syllabus**
- **Texts & Readings**
- **Course Overview**
- **Fisheries Tools & Management**



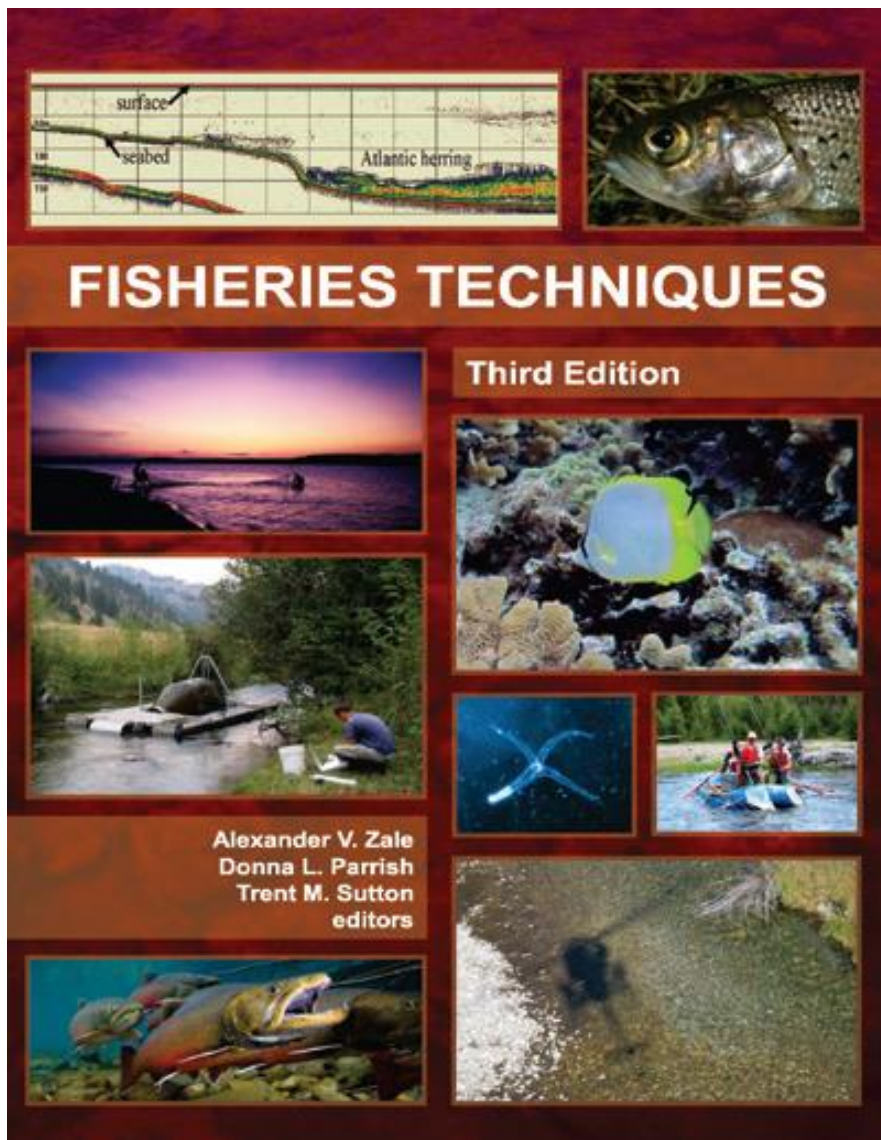
Each Module (12)

- **Module Content**
- **Self Check Quizzes**
- **Readings**
- **Videos**

Instructor Student Discussions (3)

Each Exam (3)

- **Exam Review (recording)**
- **Review Sheet .pdf**
- **iPad Exam**



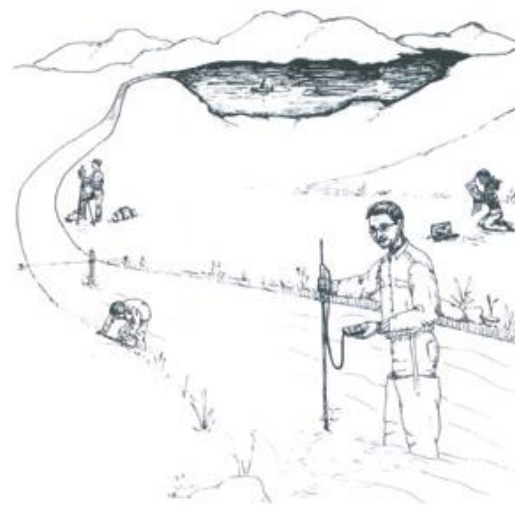
FISHERIES TECHNIQUES

Third Edition

Alexander V. Zale
Donna L. Parrish
Trent M. Sutton
editors

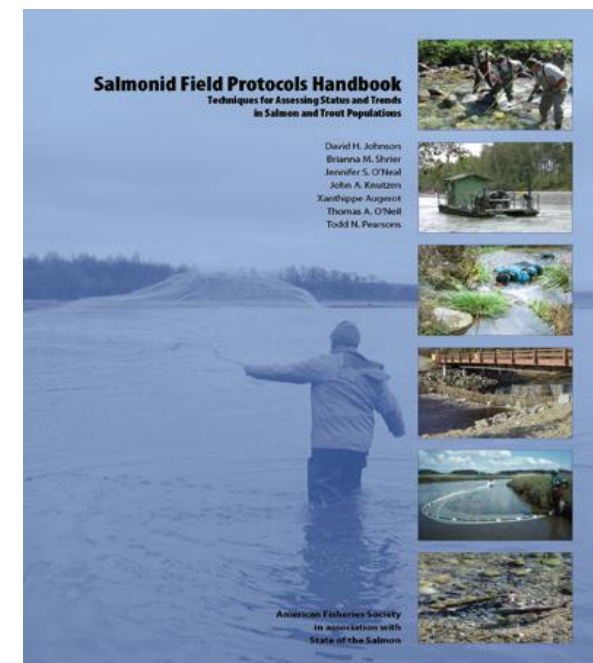
Common Methods

Aquatic Habitat Assessment



Edited by

Mark B. Bain and Nathalie J. Stevenson



Salmonid Field Protocols Handbook
Techniques for Assessing Status and Trends
in Salmon and Trout Populations

David H. Johnson
Biliana M. Shriver
Jennifer S. O'Neil
Julie A. Kautzman
Xandippe Augustin
Thomas A. O'Neil
Todd N. Pearson

American Fisheries Society
in association with
State of the Salmon

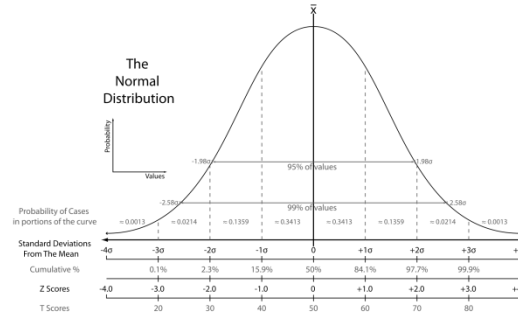
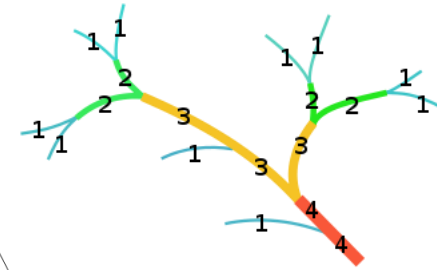


- **Fisheries Techniques 3rd Edition**
- **Common Methods in Aquatic Habitat Assessment**
- **Salmon Field Protocols Handbook**
- **Additional Readings as Assigned**



In This Course

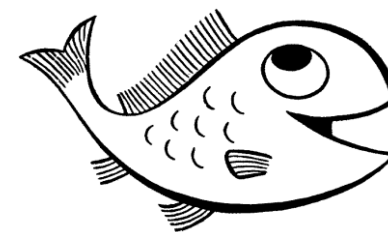
- Planning for Sampling
- Data & Statistics
- Safety in Fisheries
- Aquatic Habitat Measurement
- Care & Handling of Aquatic Organisms
- Passive Capture Techniques
- Active Capture Techniques
- Length, Weight & Associated Indices
- Age & Growth
- Marking & Tagging
- Visual Observations in Fisheries





Planning for Sampling

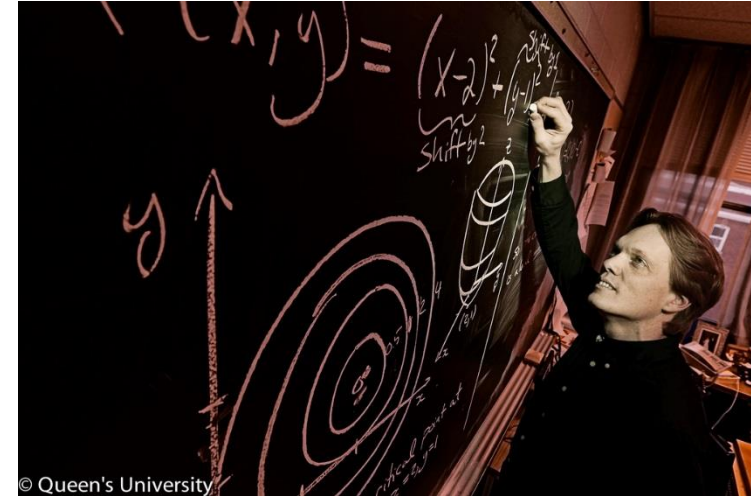
- Why do we collect information?
- Conducting Fisheries Investigations
 - Problem, Question, Info/Theory Prediction,
 - Planning, Preparing, Sampling,
 - Analysis, Interpretation



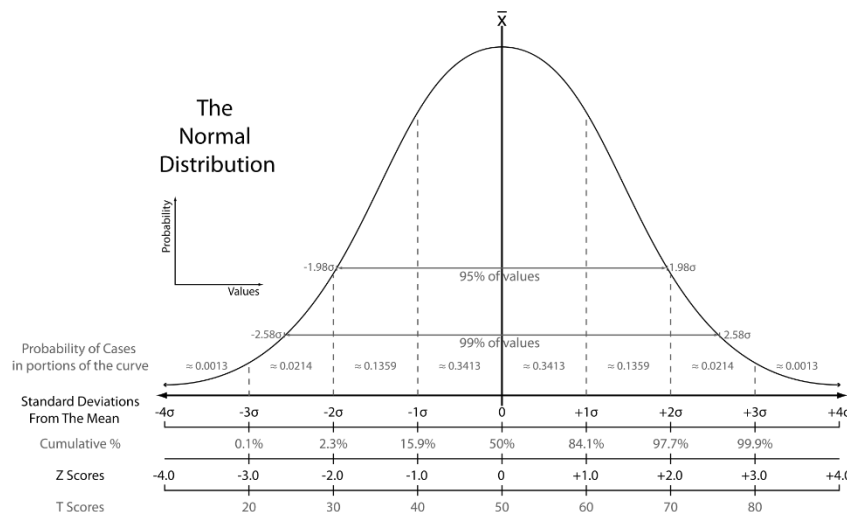


Data and Statistics

- What is Data?
- Data & Databases
- Data Management
- Visualization of Data
- Descriptive Statistics



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Safety in Fisheries

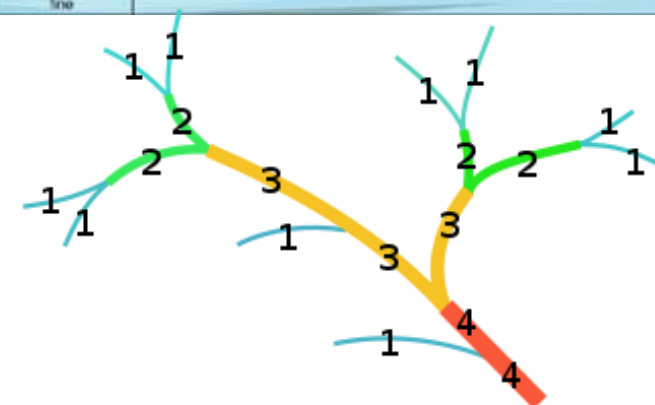
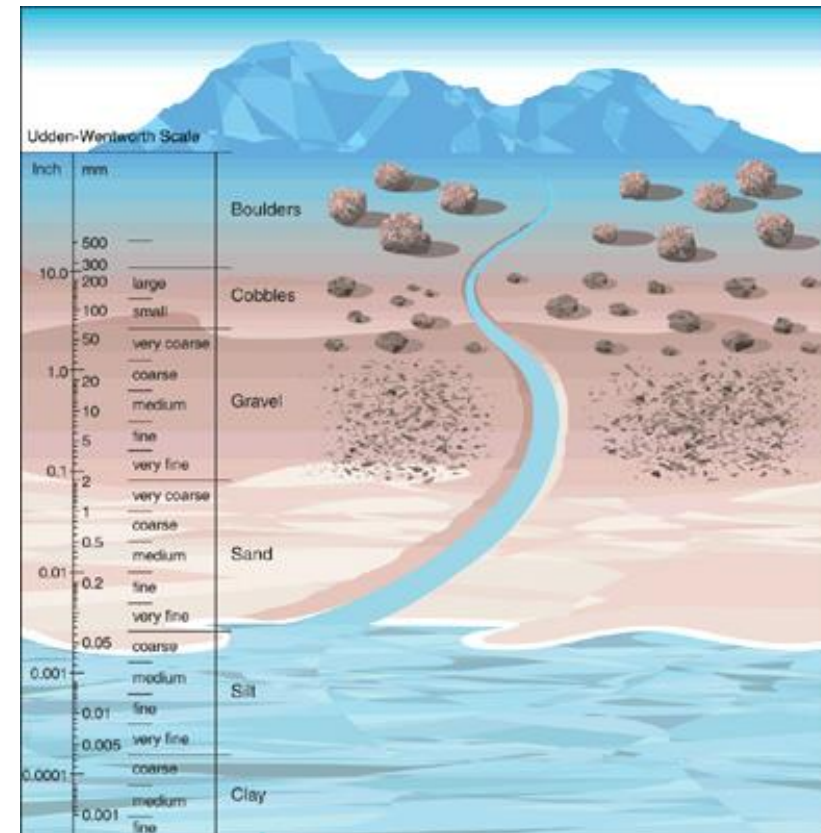
- Fisheries can be Hazardous
- Risk Factors
- Safety Attitude
- Trainings available





Aquatic Habitat Measurement

- Why do we Measure Habitats?
- Habitat Categories
 - Physical, Biological, Chemical
- Velocity, Flow, Substrate, vegetation,





Care and Handling of Aquatic Organisms

- Permits
- Stress in Fish
- Handling
- Anesthesia
- Euthanasia





Passive Capture Techniques

- Passively Capturing Fish
 - Entanglement
 - Entrapment
 - Angling





Active Capture Techniques

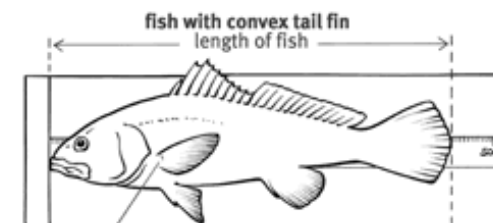
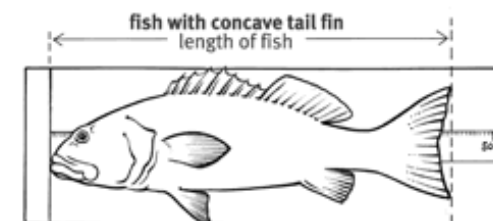
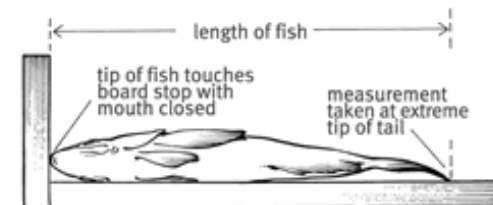
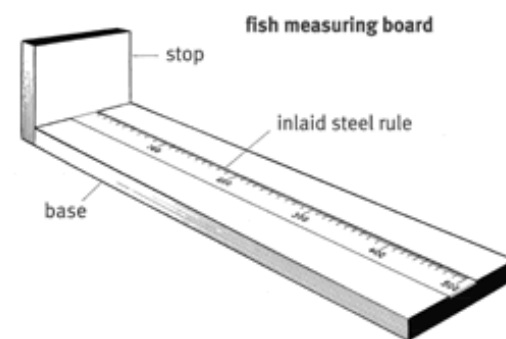
- Actively Capturing fish
 - Towed
 - Dragged
 - Surrounded





Length, Weight & Associated Indices

- How long
- How Heavy
- Length vs. Weight
- New Technologies



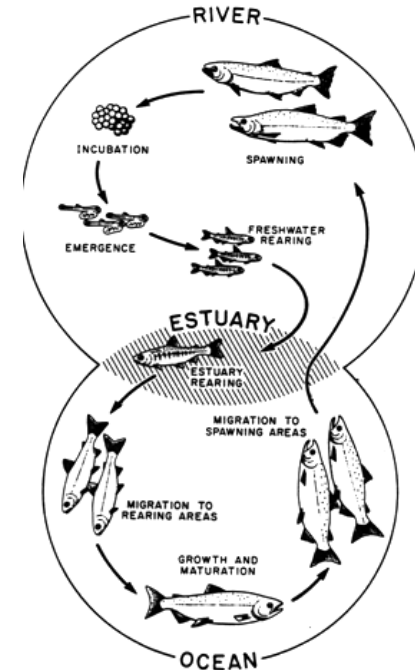
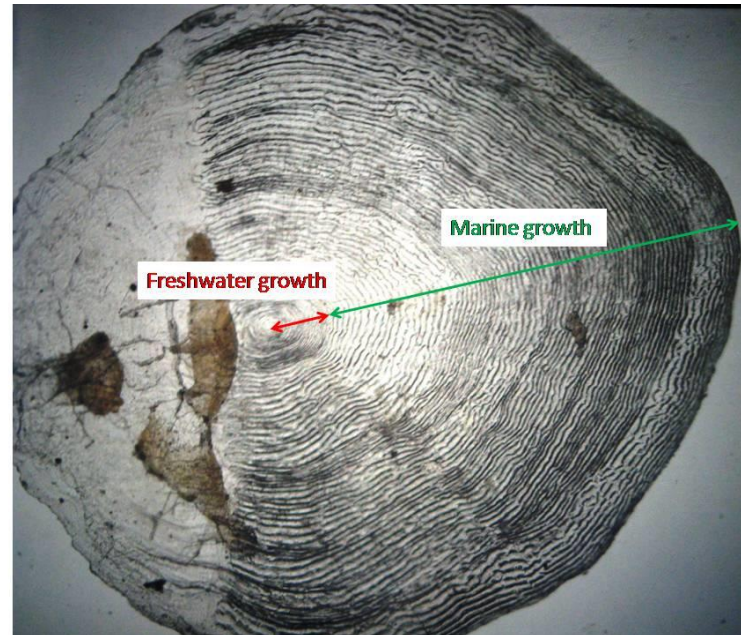
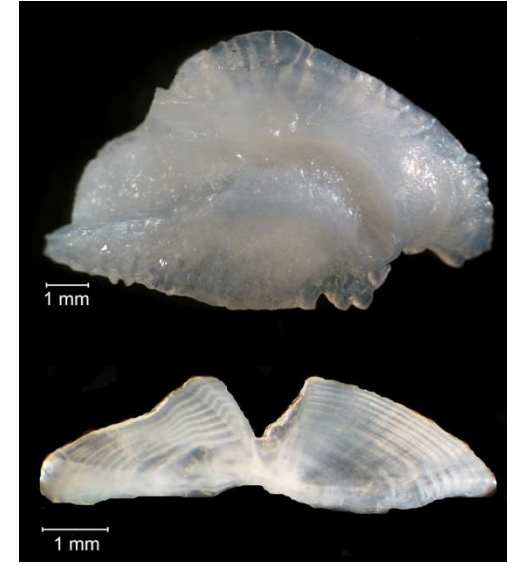
Fin fish pectoral fin





Age & Growth

- Age vs. Growth
- Growth Estimates
 - Length freq.
 - Recapture
 - Scales
 - Otoliths





Marking & Tagging Aquatic Organisms

- Marks vs. Tags
- External
- Internal
- Smart Tags





Visual Observations in Fisheries

- Sometimes best way to see what's going on or how many
 - Above water
 - Below water





Self Check

- We will be learning about fisheries policy in this course
 - True
 - **False**

- Fish are not dangerous so we do not spend much time talking about safety
 - True
 - **False**



Fisheries





Fisheries Management

- “Fisheries management draws on fisheries science in order to find ways to protect fishery resources so sustainable exploitation is possible”
- We will Look specifically at the tools managers use to manage fisheries!





Welcome & Enjoy!