

Kenai River Chinook Salmon Scale Ageing



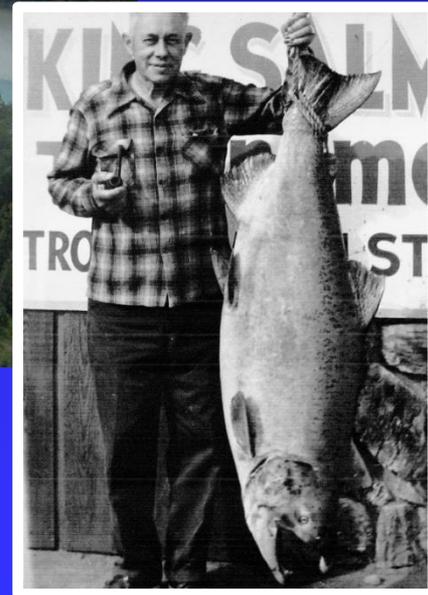
Tony Eskelin and Jeff Perschbacher
ADF&G Sport Fish - Soldotna

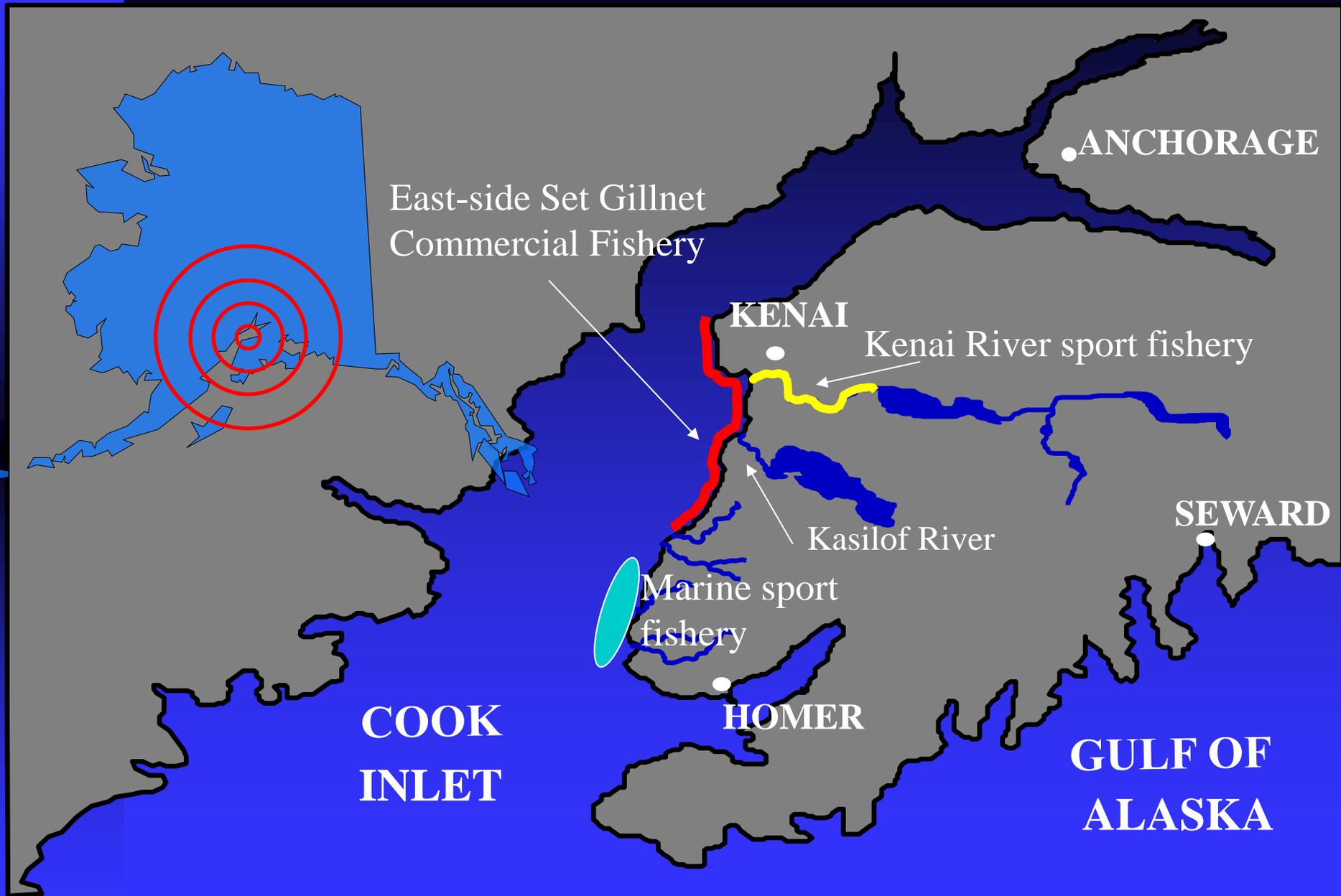
Run timing – stream type

Tributary Spawning
“Early Run”



Mainstem Spawning
“Late Run”





Inriver gillnetting



Sport harvest sampling



Commercial harvest sampling



Ages

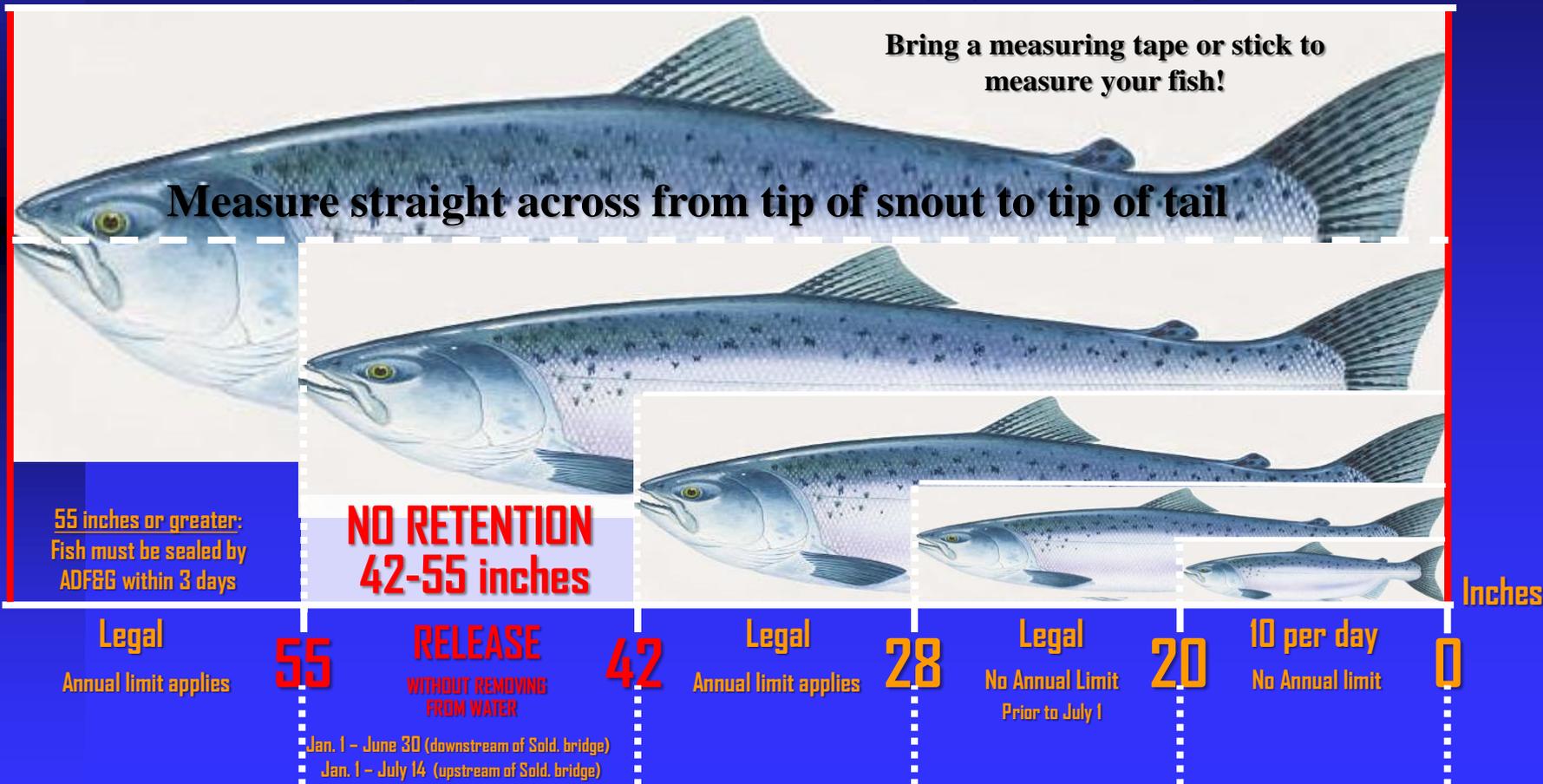
- Traditionally age 1.4 dominant
- More younger fish recently
- Jacks
- Decline in 5-ocean fish (early run)

Kenai River King Salmon Length Regulations



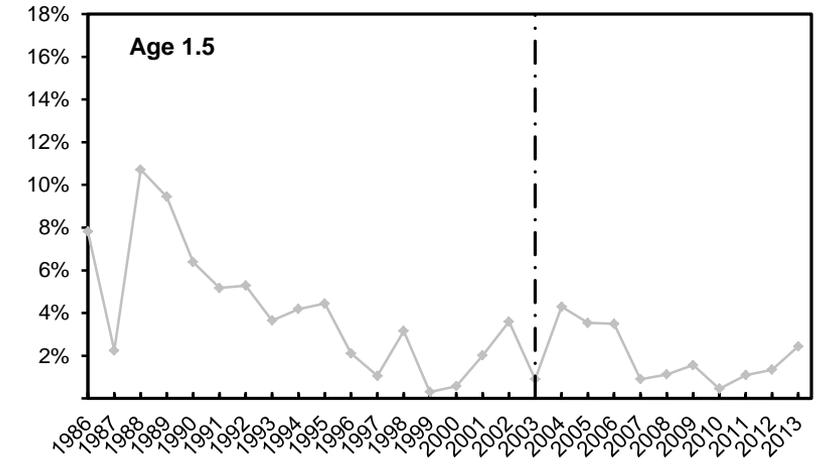
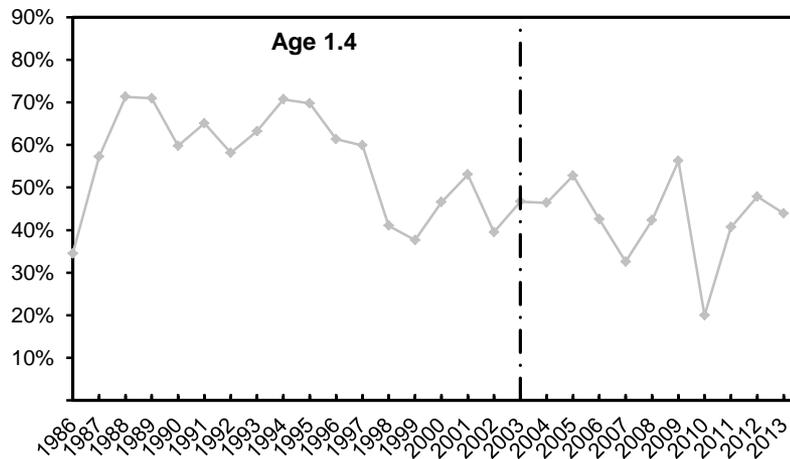
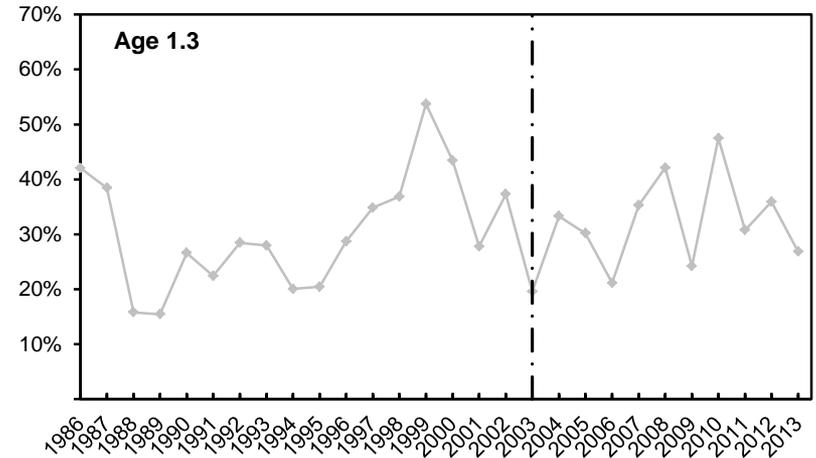
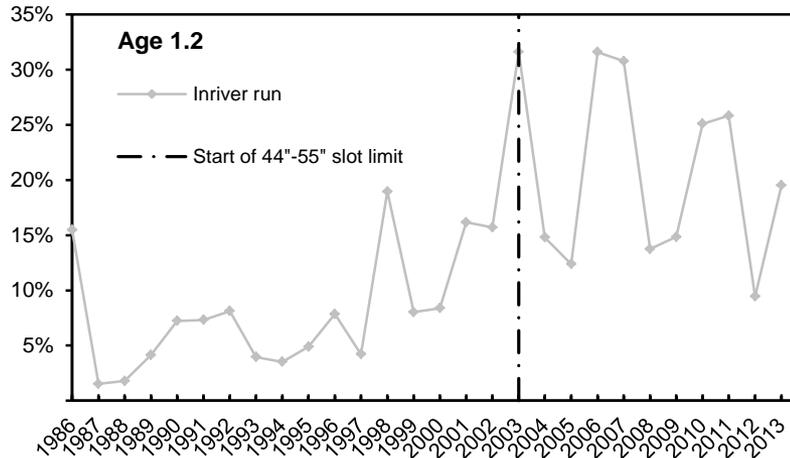
★ **Daily Bag and Possession Limit is One King Salmon 20 Inches or Longer**

- The Annual Limit for Kenai River King Salmon is 2 King Salmon.
- No person, after retaining a king salmon 20 inches or longer, may on that same day, fish from a boat for any species of fish downstream of Skilak Lake.
- **NO RETENTION** of fish 42-55 inches through June 30 downstream of Soldotna Bridge and through July 14 upstream of Soldotna Bridge.



Decline in 5-ocean fish

Early run only



Slot limit to protect 5-ocean fish

Early run only



Materials for scale aging

- Pressed on acetates using a PHI bench press at 25k PSI for 2min at 190 deg.
- Microfiche reader

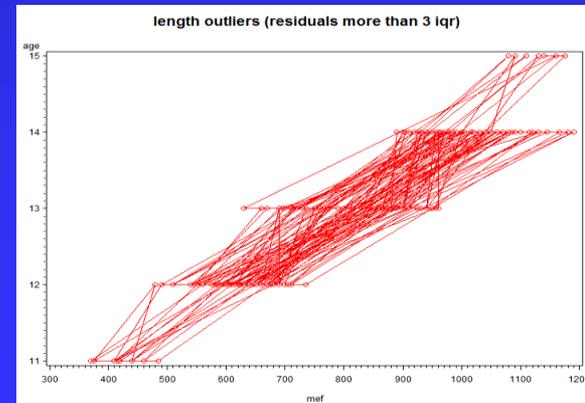
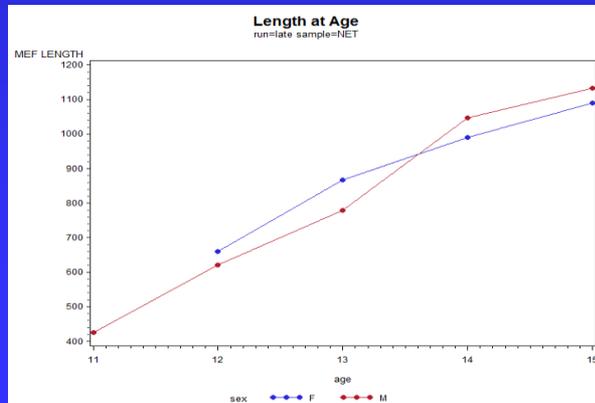


Age training methods

- Determine quality of the scale
 - Ageable or: inverted, regenerated, illegible, missing, reabsorbed, wrong species, not preferred
- Age along the same line of scale
 - Focus out ~50 deg.
- Average circuli per annuli
- Practice aging a reference set of known-ages
 - Approximately 125 scales from CWT fish

Steps taken to ensure consistency among age readers

- Develop a consistent ageing method
- Consensus with others on questionable scales
- Trained from same person
- Scale reference set practiced pre-season
- Quality control error checks



Challenges to ageing Chinook salmon scales

- False checks
- Freshwater age
- Age estimation of reabsorbed, spawned out kings
- Volume of scales to read at end of season
- Validation of historic data set