LONG-TERM VARIABILITY in SIZE-AT-AGE of PACIFIC HALIBUT

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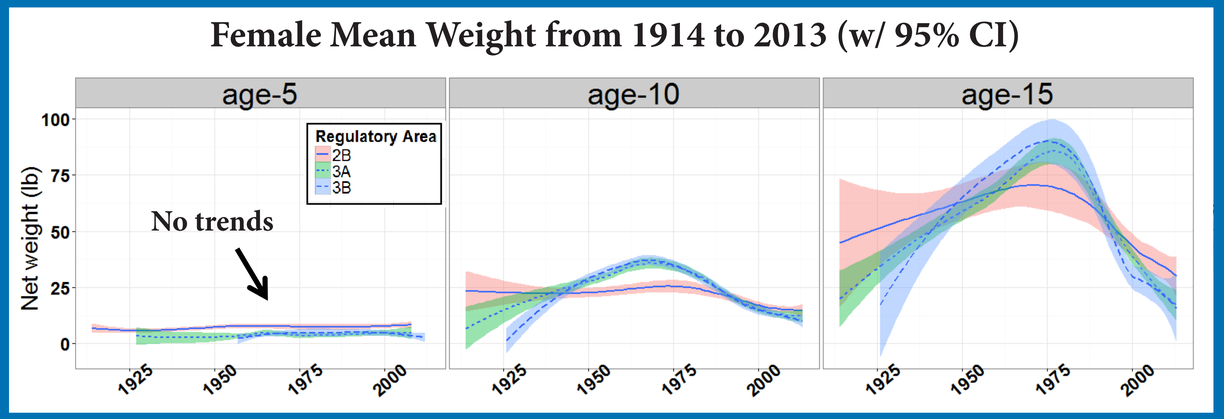
PROBLEM: Steep declines in size-at-age of Pacific halibut since 1990.

OBJECTIVE: Describe spatial & temporal variability in size-at-age and growth of Pacific halibut from 1914 to 2013.

METHODS:

- Length-at-age data from IPHC surveys (1914-2013)
- Examine trends by year, age, and regulatory area
- Fit von Bertalanffy growth curves using non-linear least squares regression

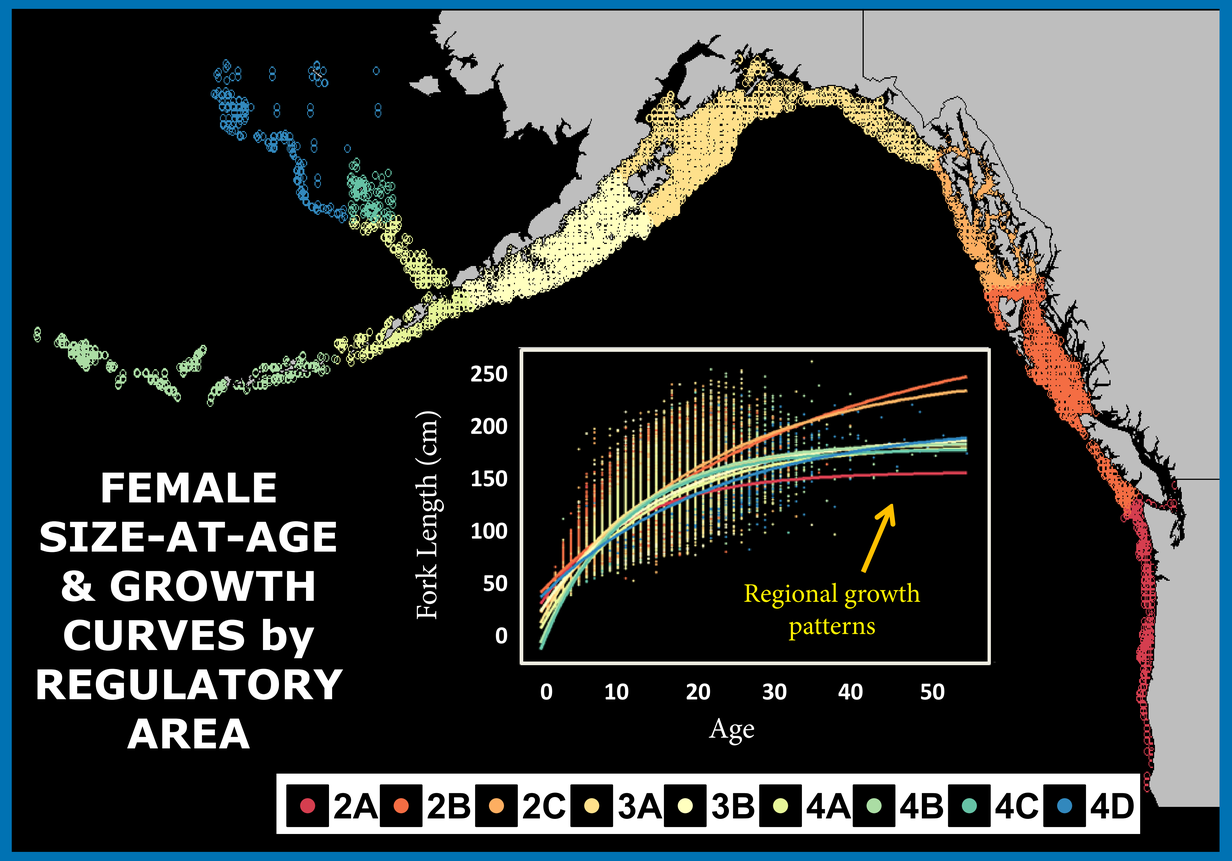


RESULTS:

- Current size-at-age (SAA) similar to 1920s
- No trends in SAA for young fish (< 8 yrs)

Regional growth patterns:

1. Offshore Washington (lowest growth)
2. British Columbia & SE Alaska (highest growth potential)
3. Central/western Gulf of Alaska, Aleutian Is., Bering Sea (intermediate growth)



FUTURE:

1. Incorporate environmental & ecological covariates in growth models
2. Examine effects of harvest, bycatch, and size-selective fishing on size-at-age

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