

Nine Years of Fisheries Research on Prairie Creek, Redwood National & State Parks: A Summary

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Goal

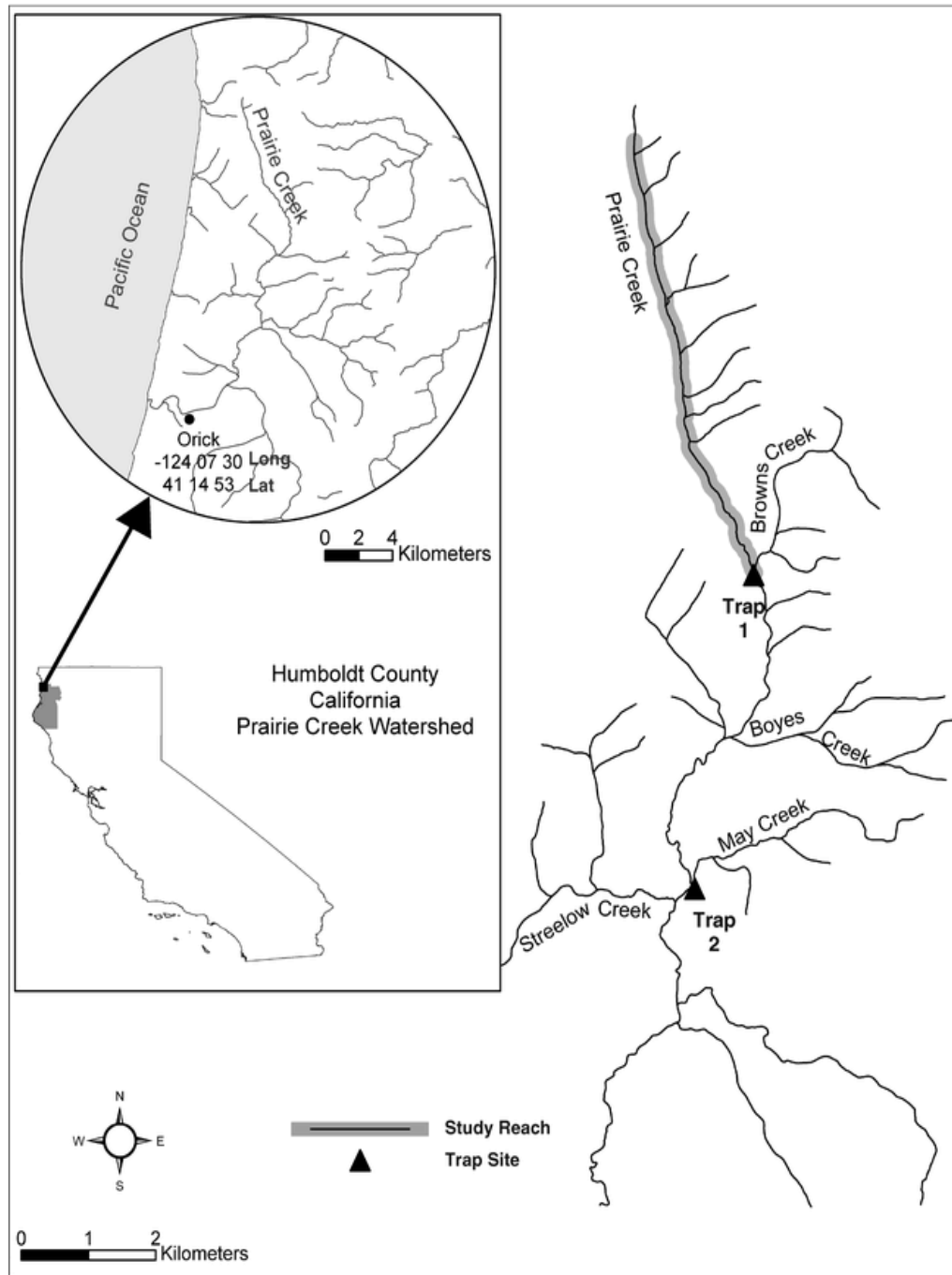
To develop a long-term data set for coho salmon that can be used to investigate fish performance in relation to landscape and environmental influences

- a. Now have data for 3 generations of coho salmon
- b. Additional data for Chinook salmon, steelhead, coastal cutthroat trout and other species.
- c. Theses and publications at:
<http://www.humboldt.edu/~cuca/documents/>

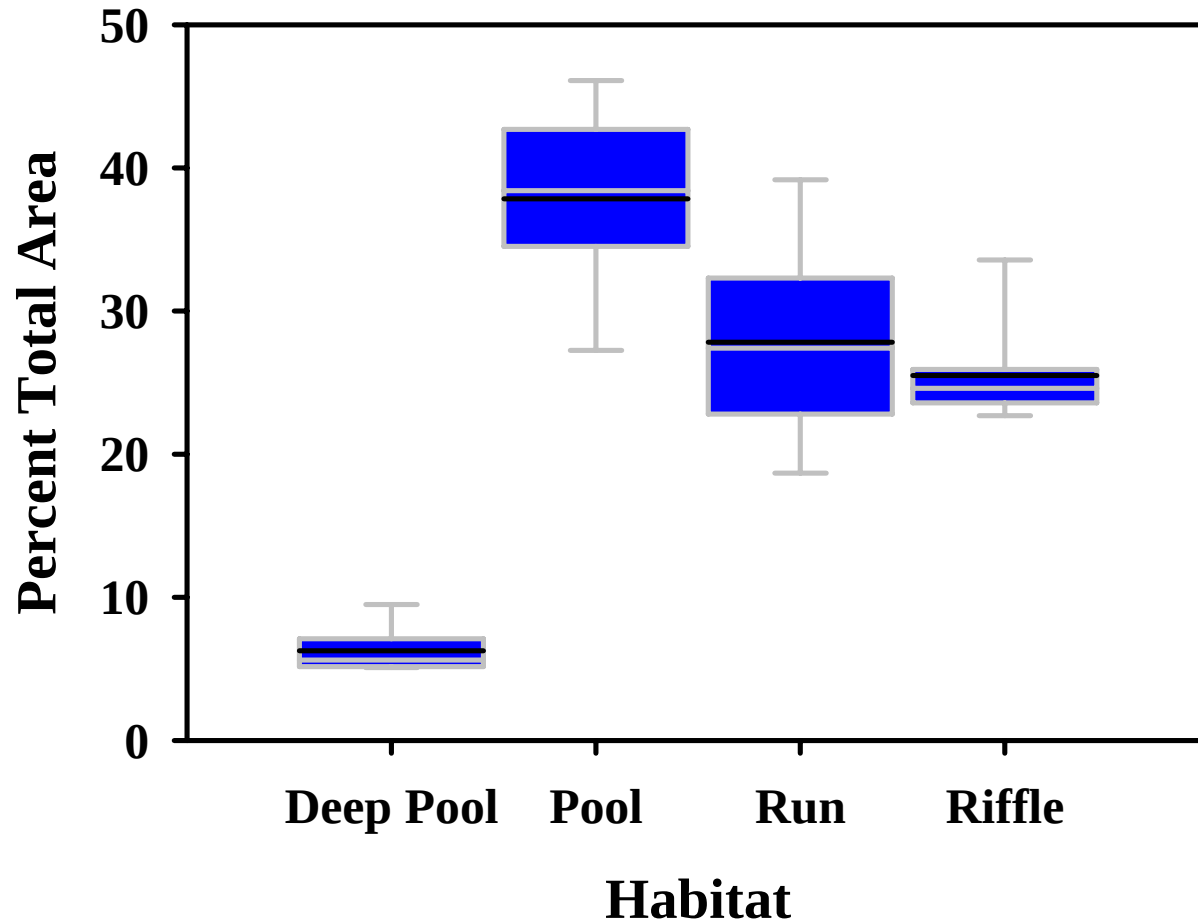
Outline

1. Habitat
2. Juveniles
 1. Survival
 2. Abundance & Distribution
3. Smolts
 1. Production
4. Adults
 1. Escapement
 2. Timing

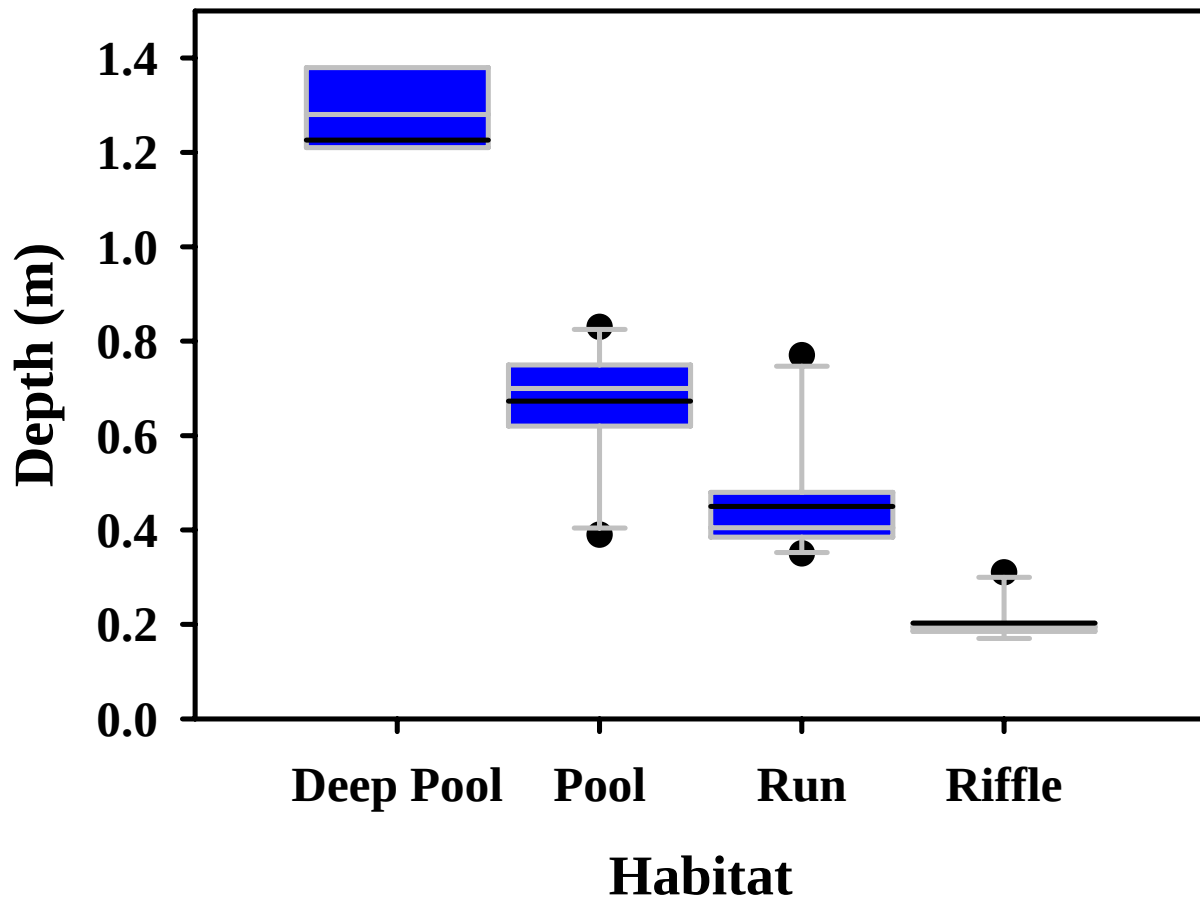
Area of Study



Percent Habitat Area



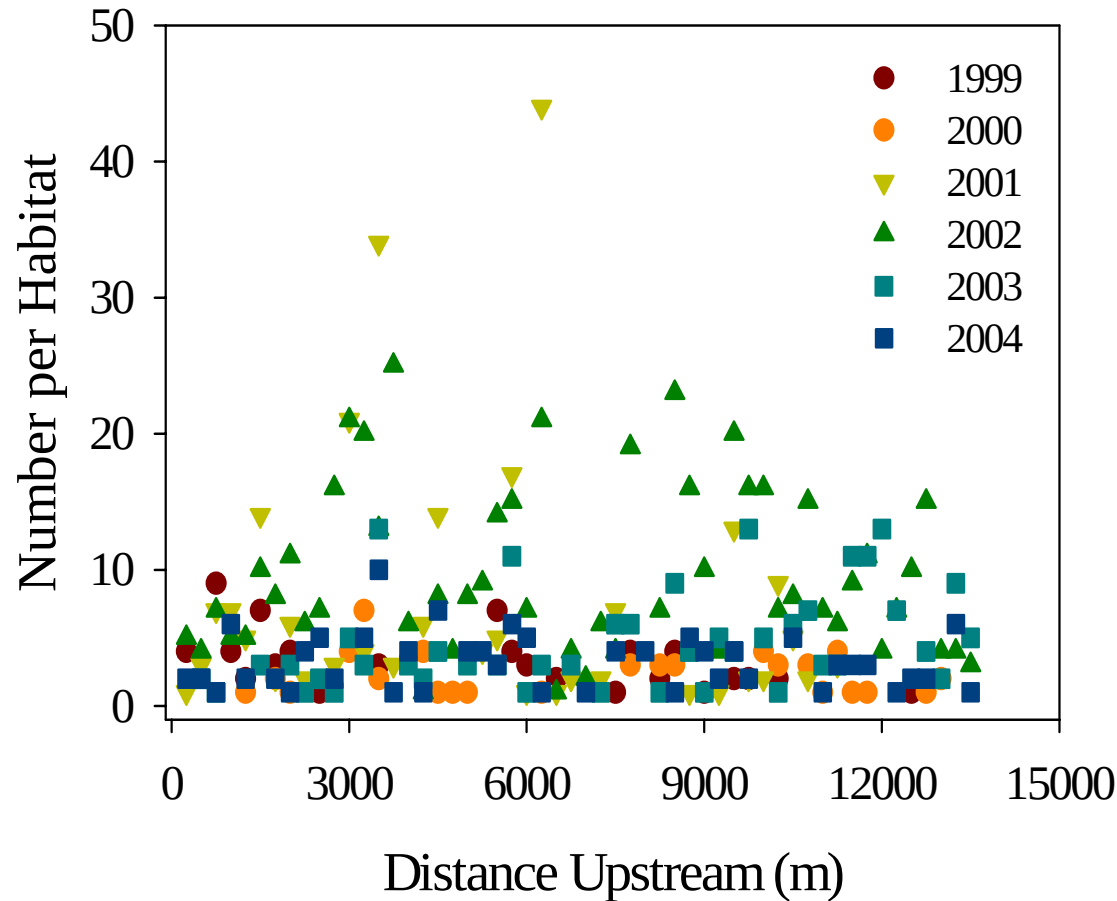
Average Max Depth of Habitats



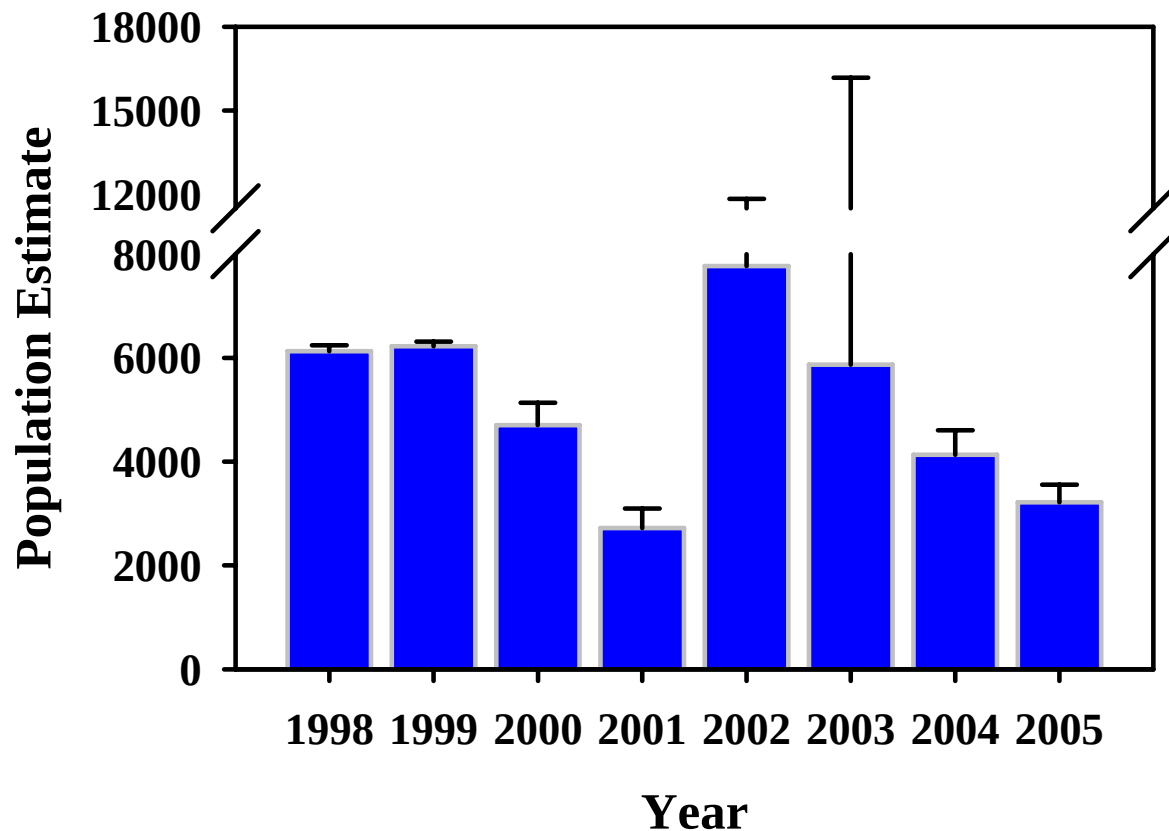
Studies of juveniles



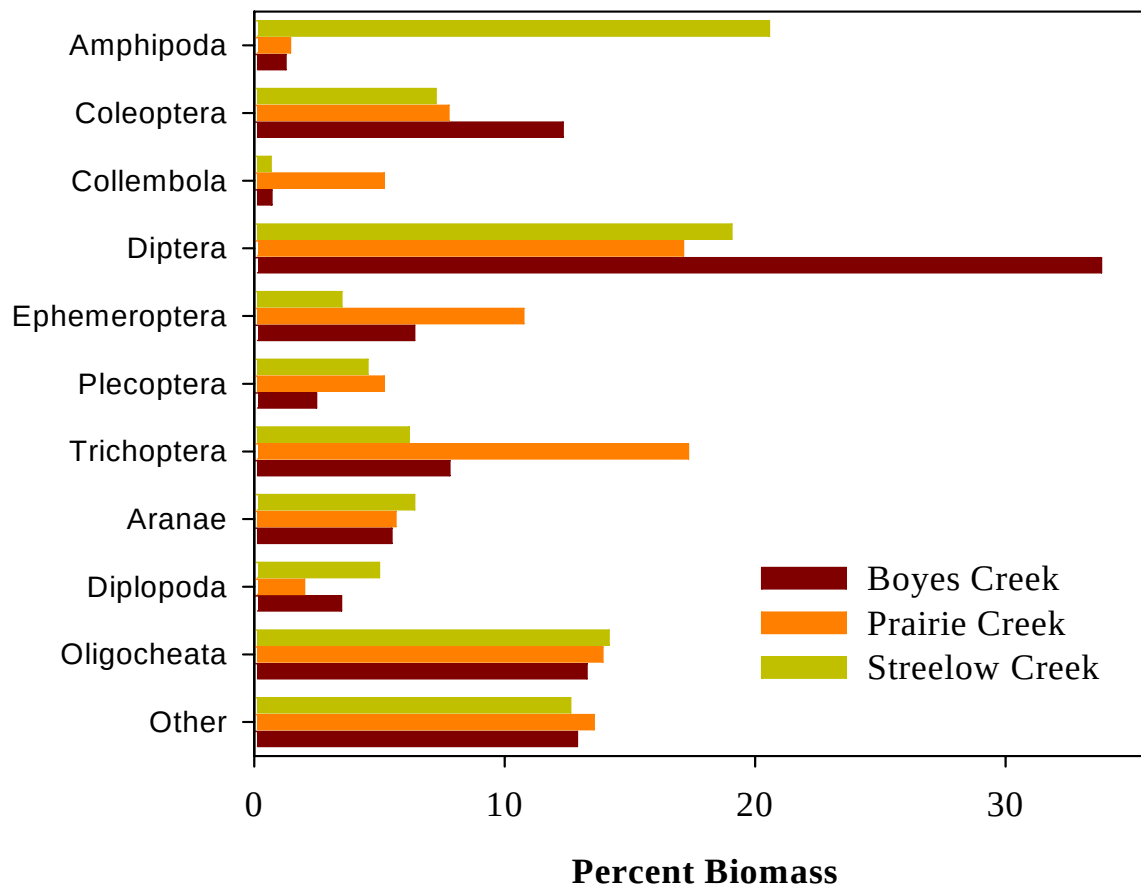
Juvenile coho salmon distribution



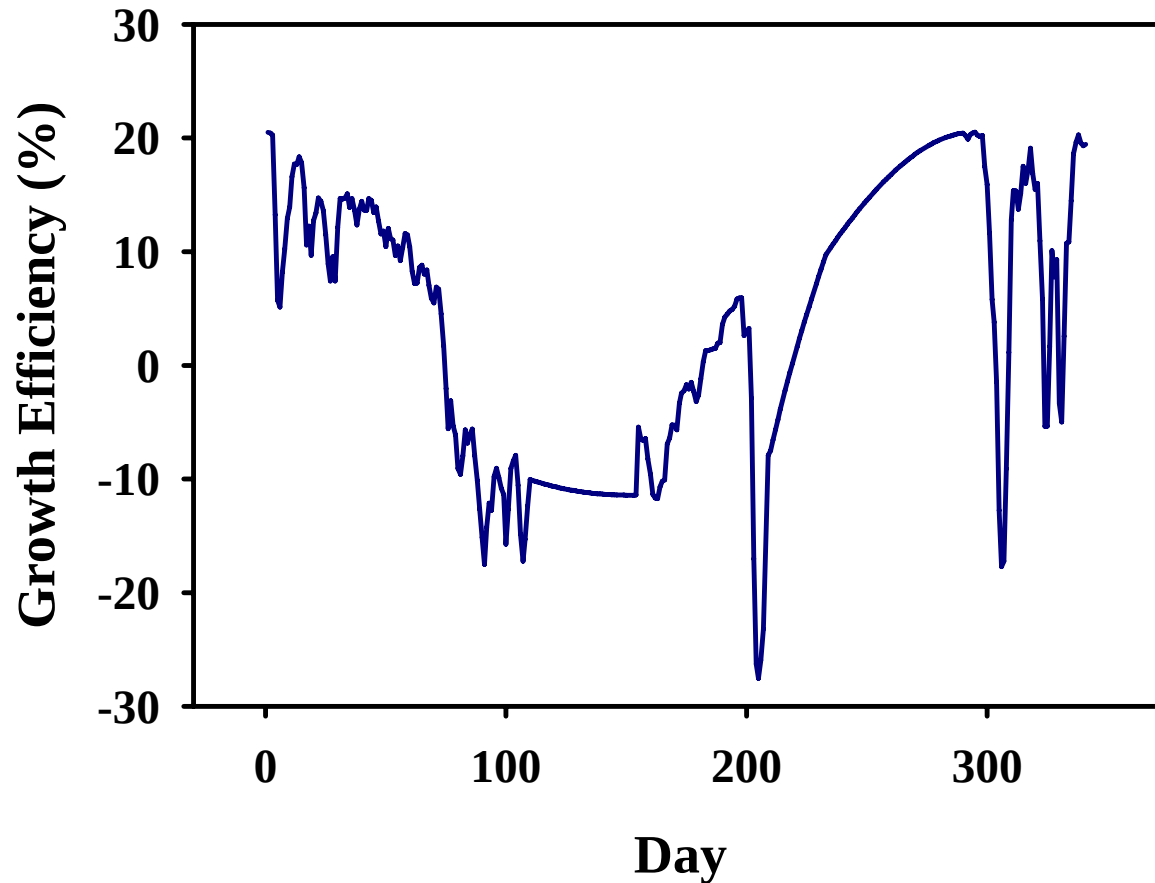
Juvenile coho salmon abundance in July/August



Juvenile coho salmon diet



Growth efficiency of juvenile coho salmon



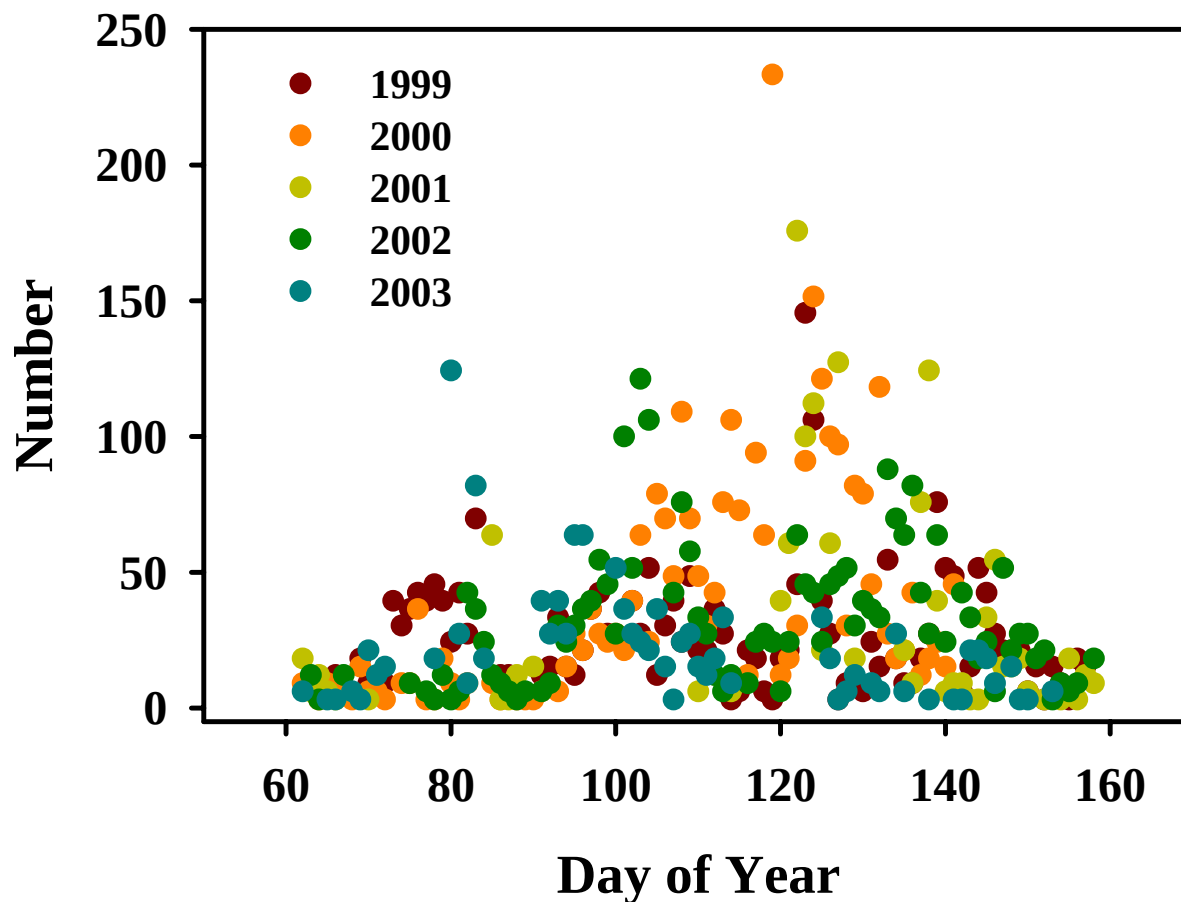
Predation in downstream migrant traps (average of 3 years)

	Coho salmon	Chinook salmon	Total salmonids
Population estimate	29,775	338,715	373,417
Number consumed	737	5,018	8,064
Percent consumed	2.5	1.5	2.2

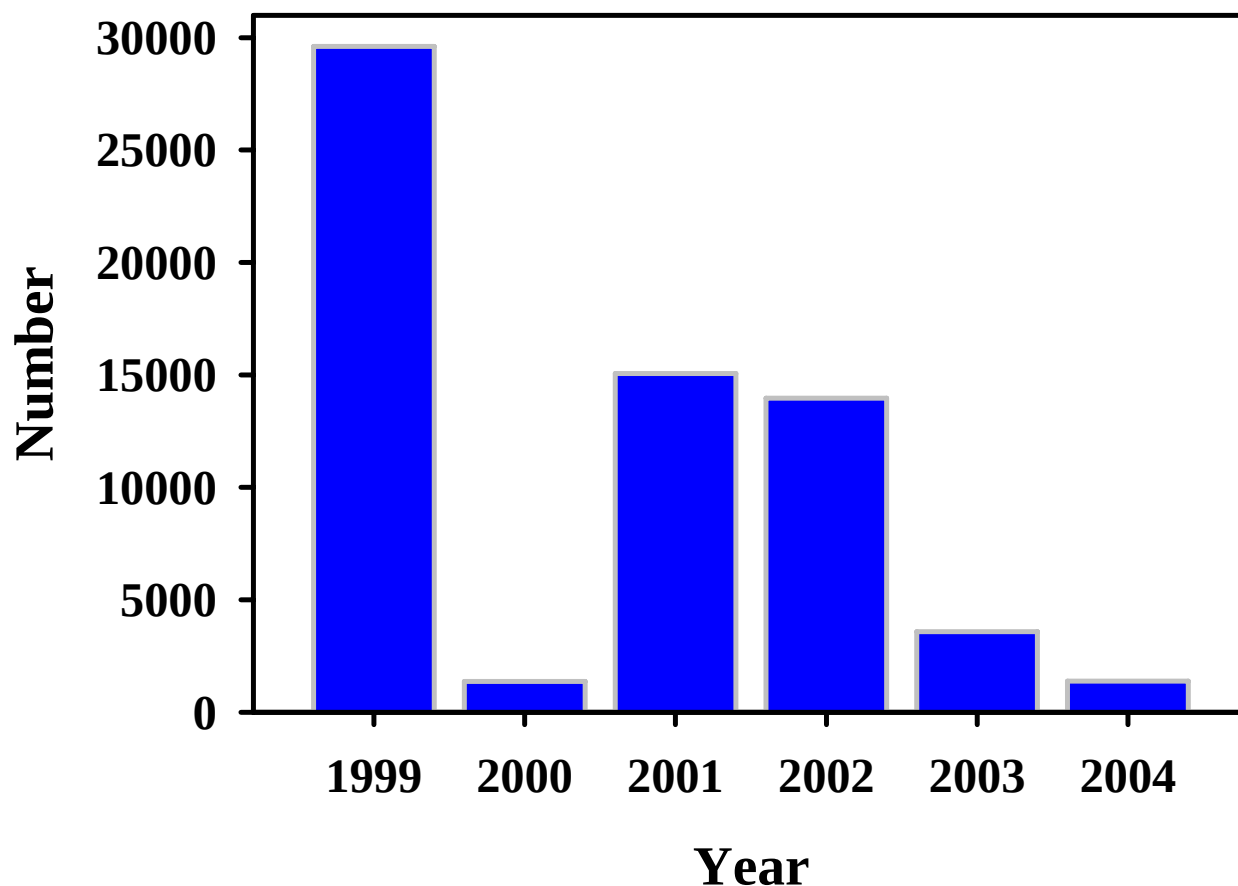
Studies of smolts



Timing of coho salmon smolt migration



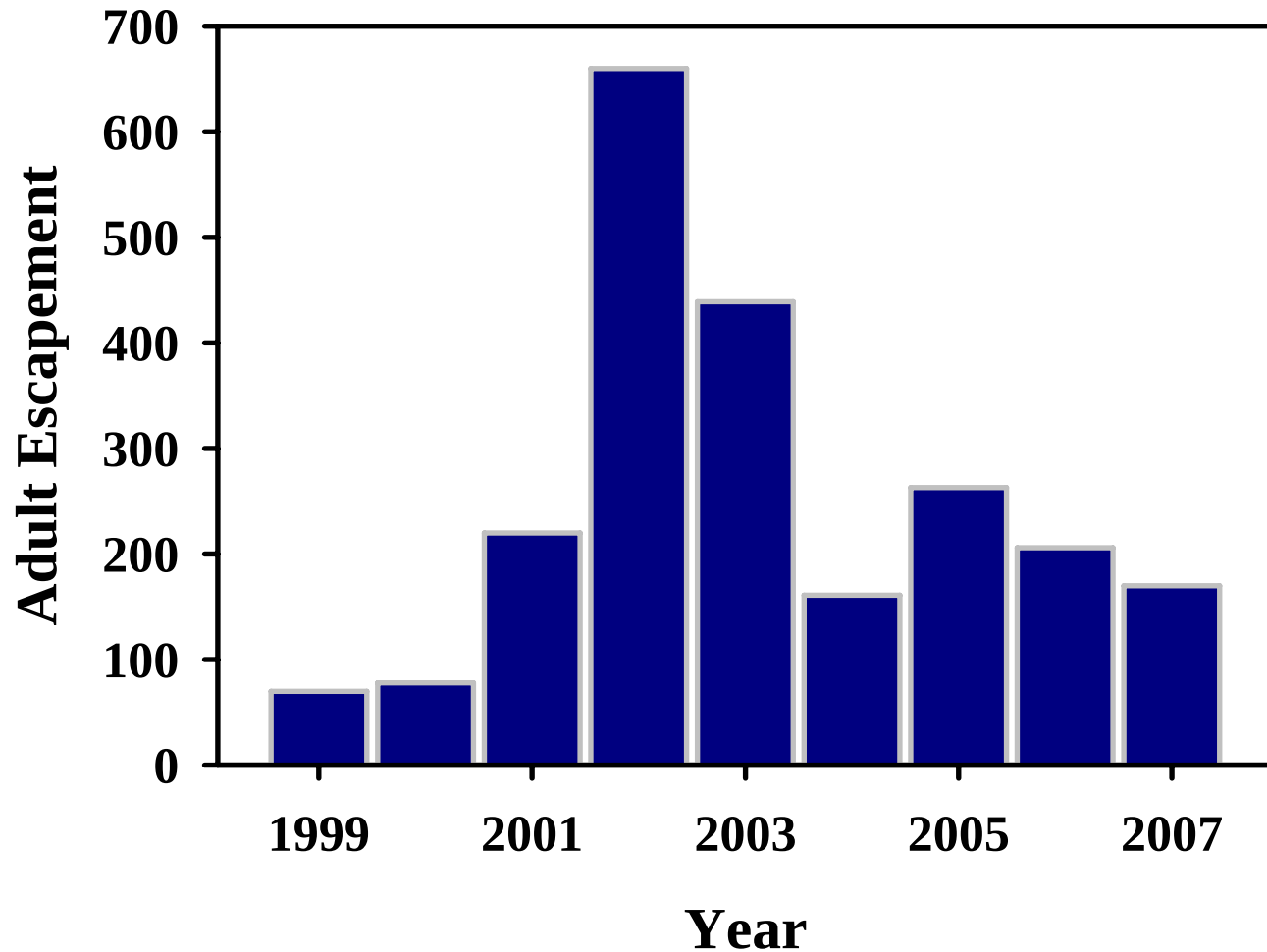
Number of coho salmon smolts



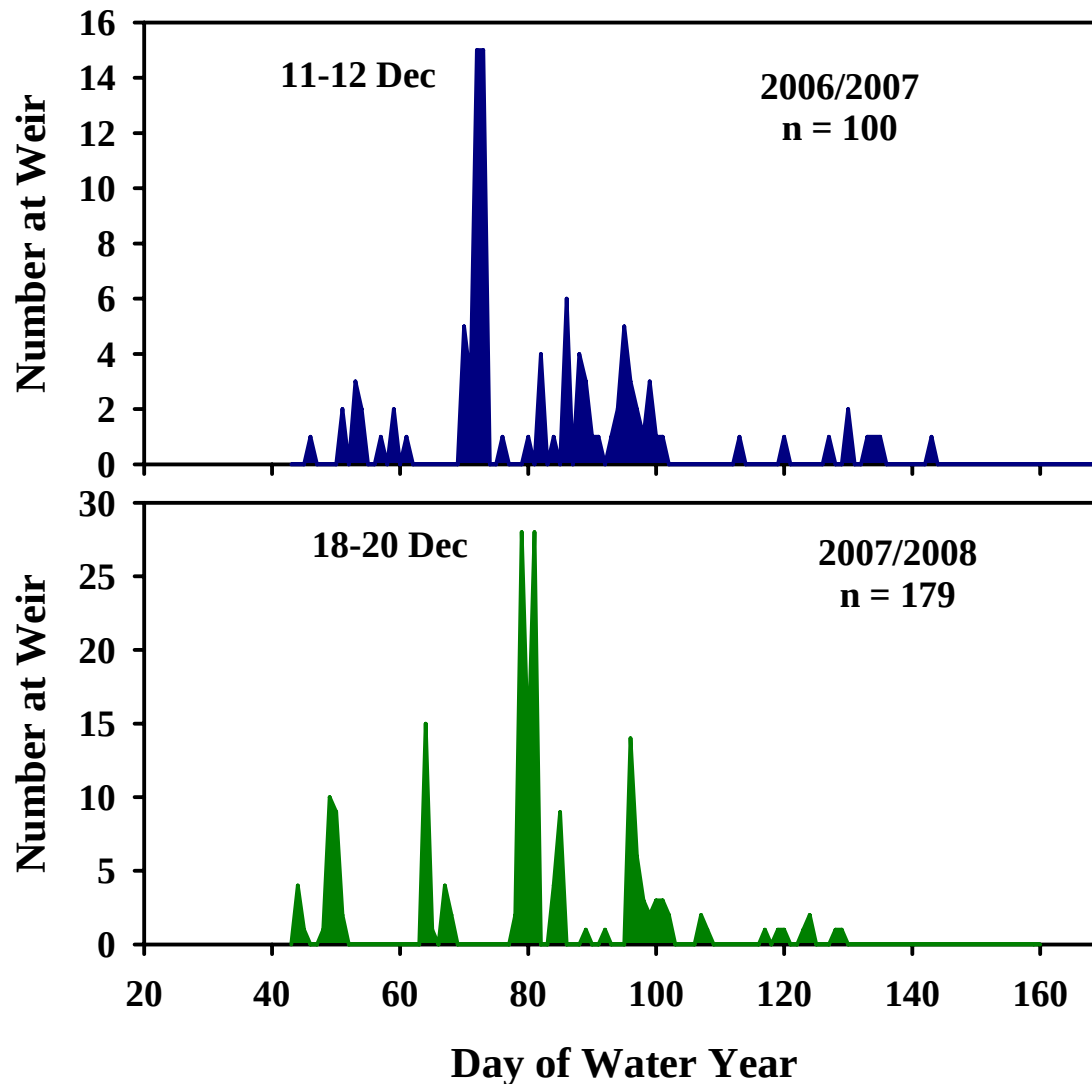
Studies of adults



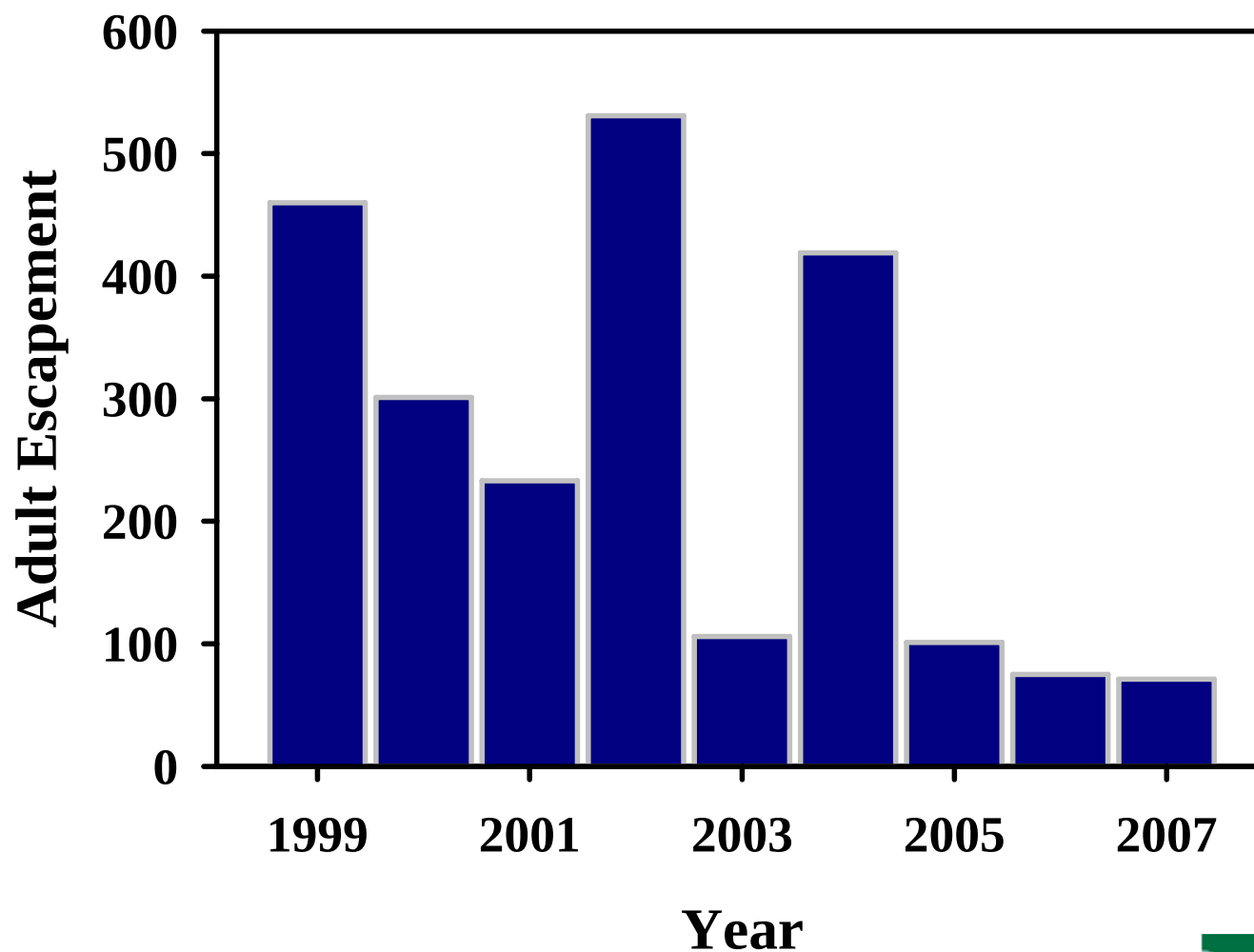
Adult Coho Salmon Escapement



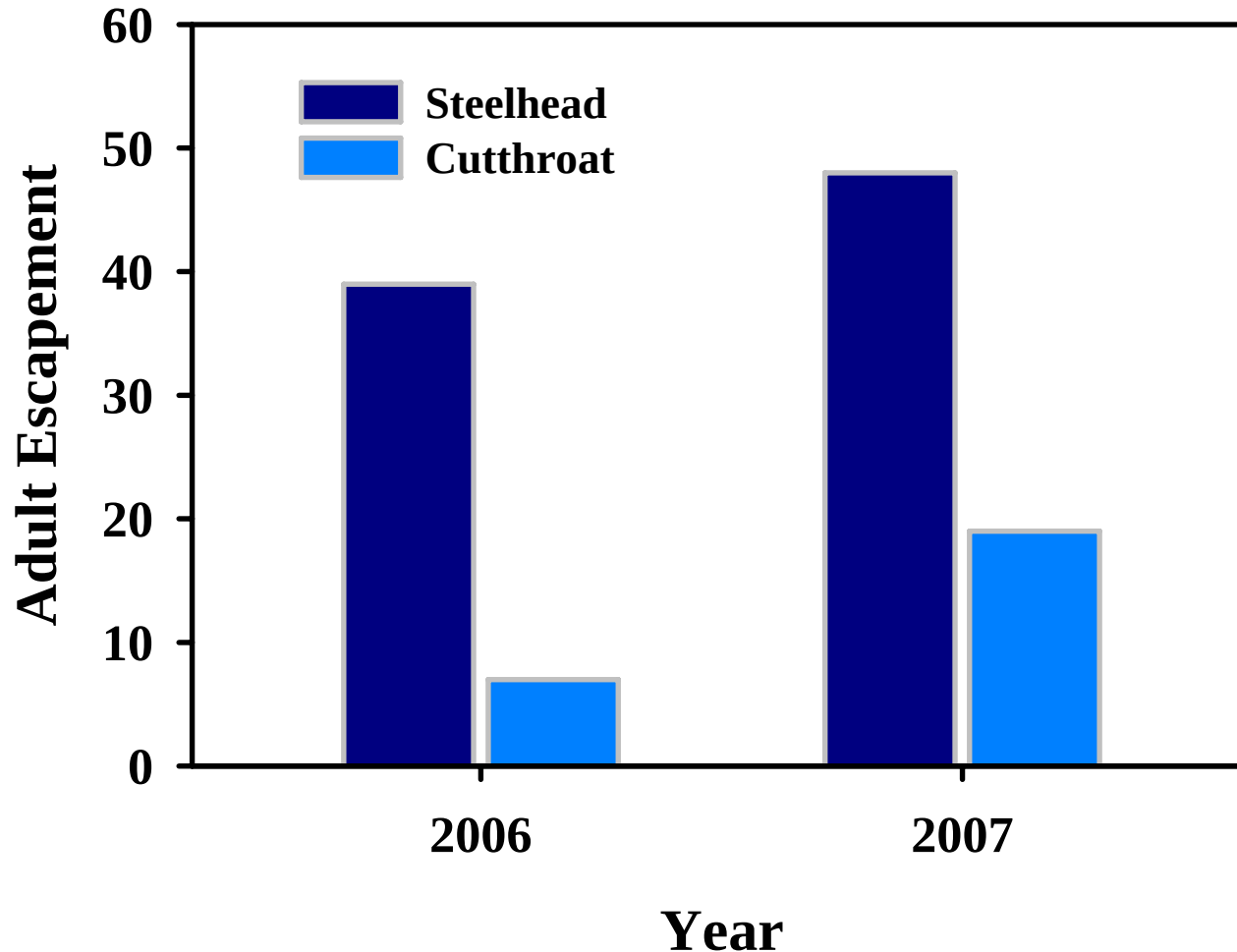
Time of adult coho salmon returns



Adult Chinook Salmon Escapement



Adult Steelhead & Cutthroat Trout Escapement

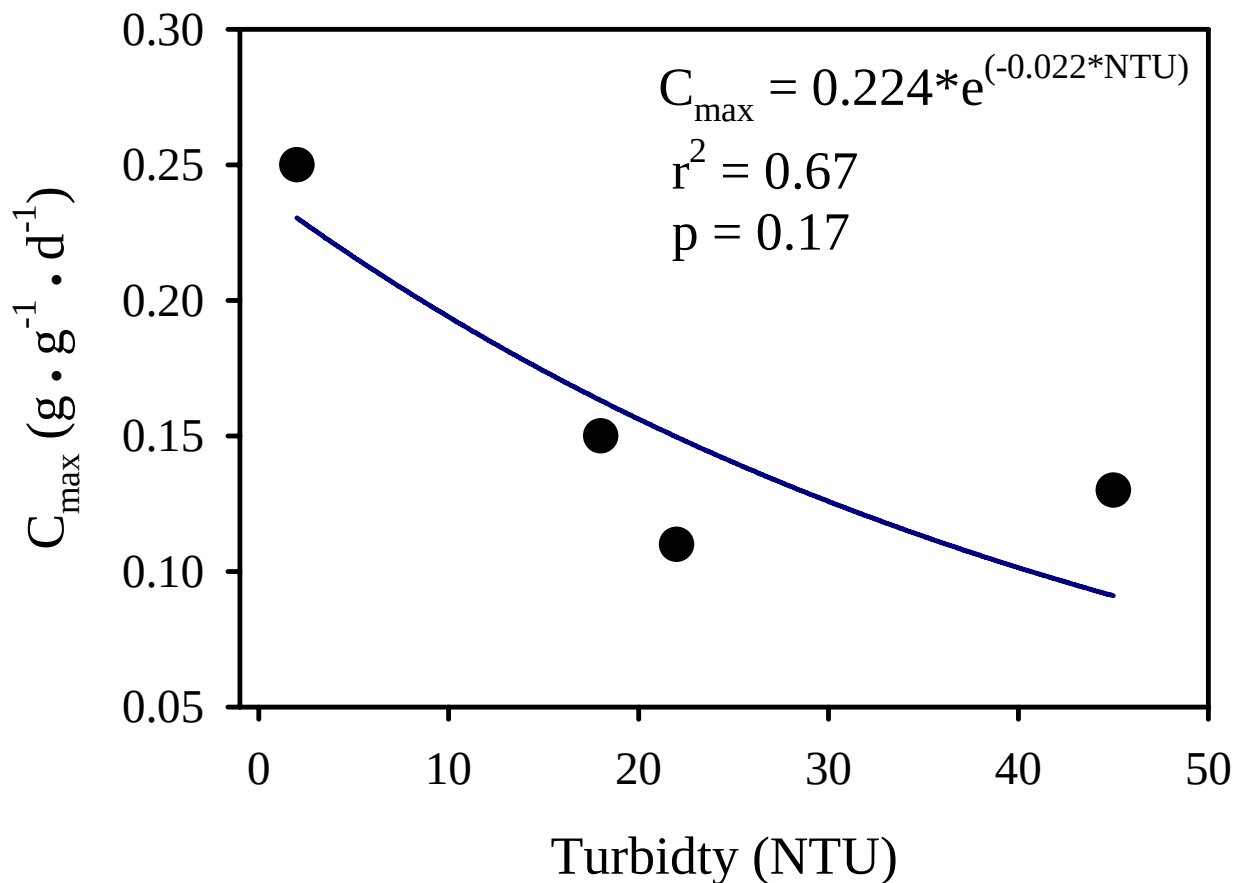


Coastal cutthroat trout





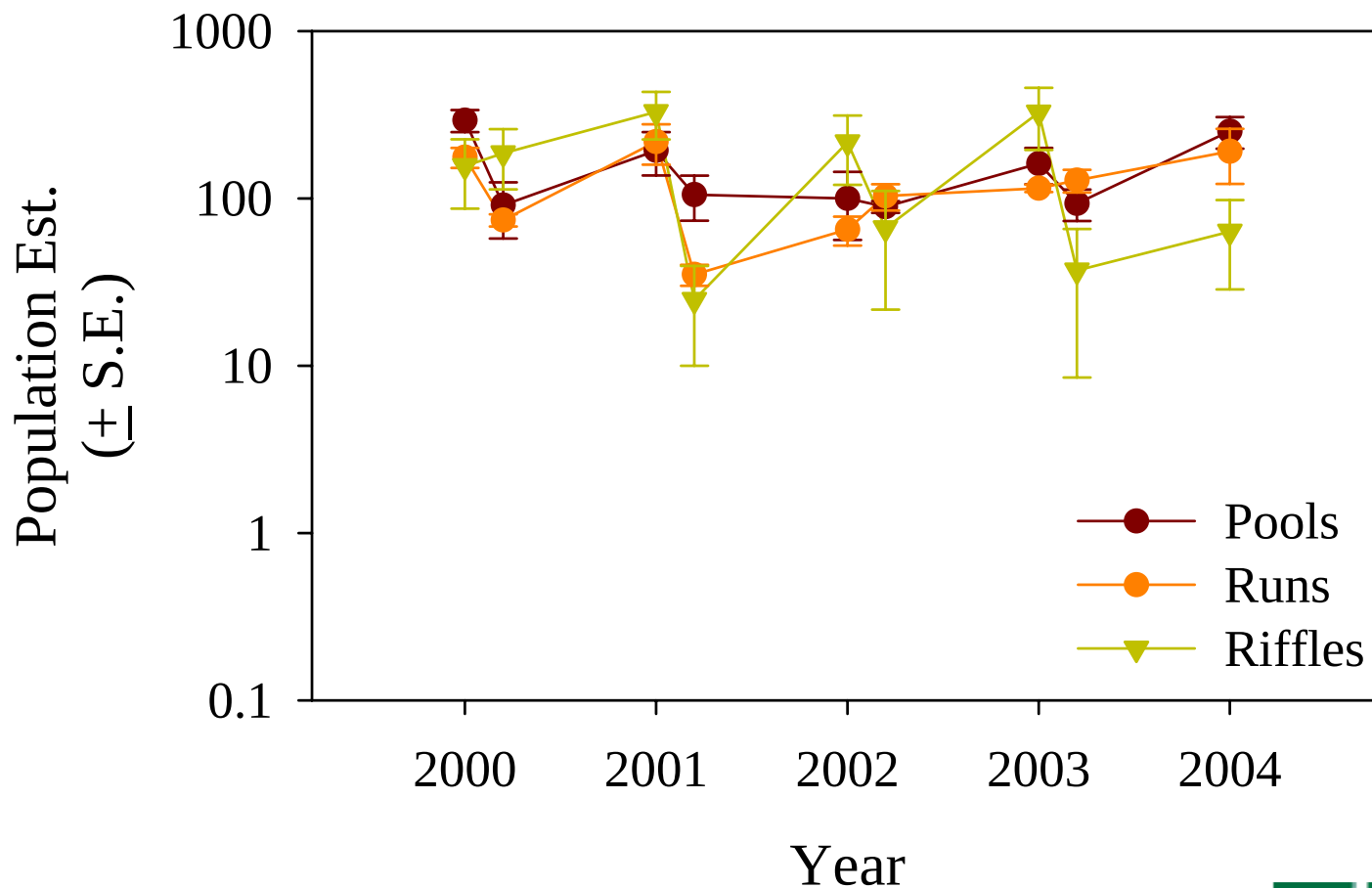
Consumption by cutthroat trout vs. Turbidity



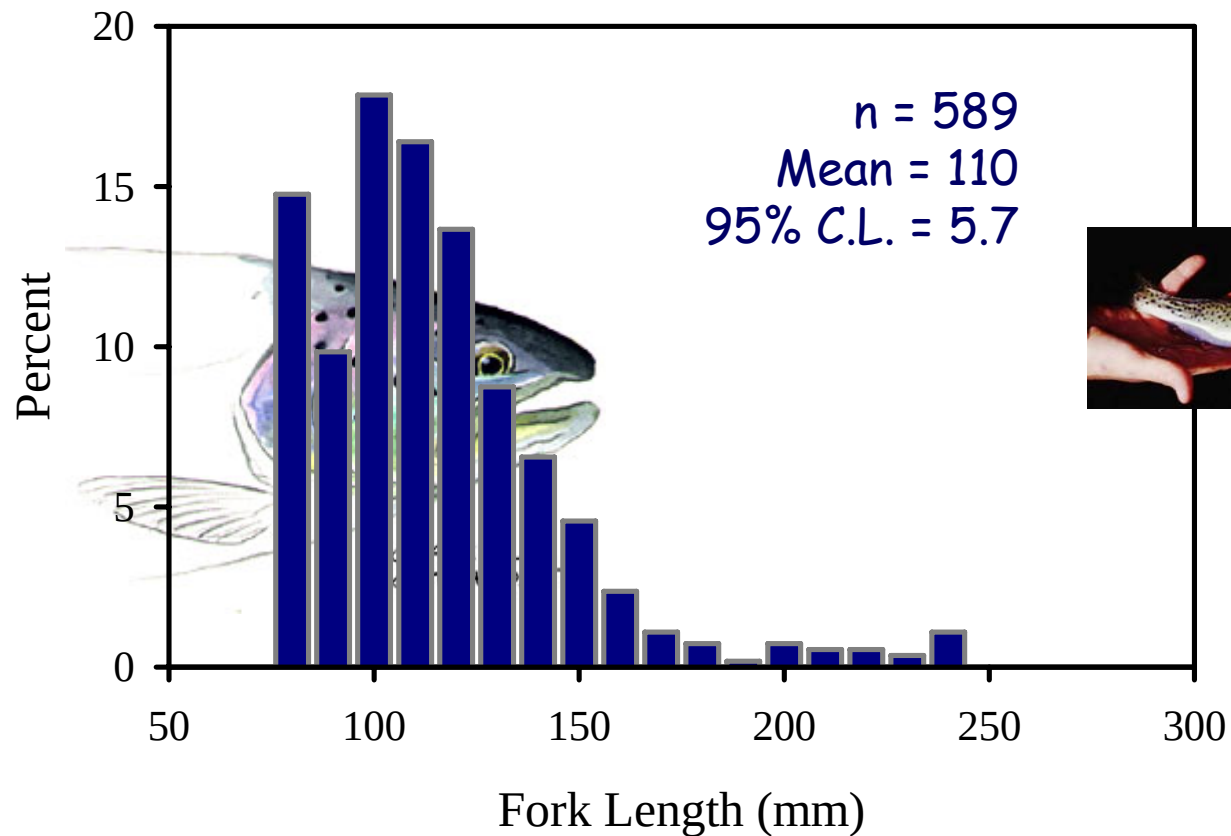


Cutthroat Trout Population Abundance

Prairie Creek

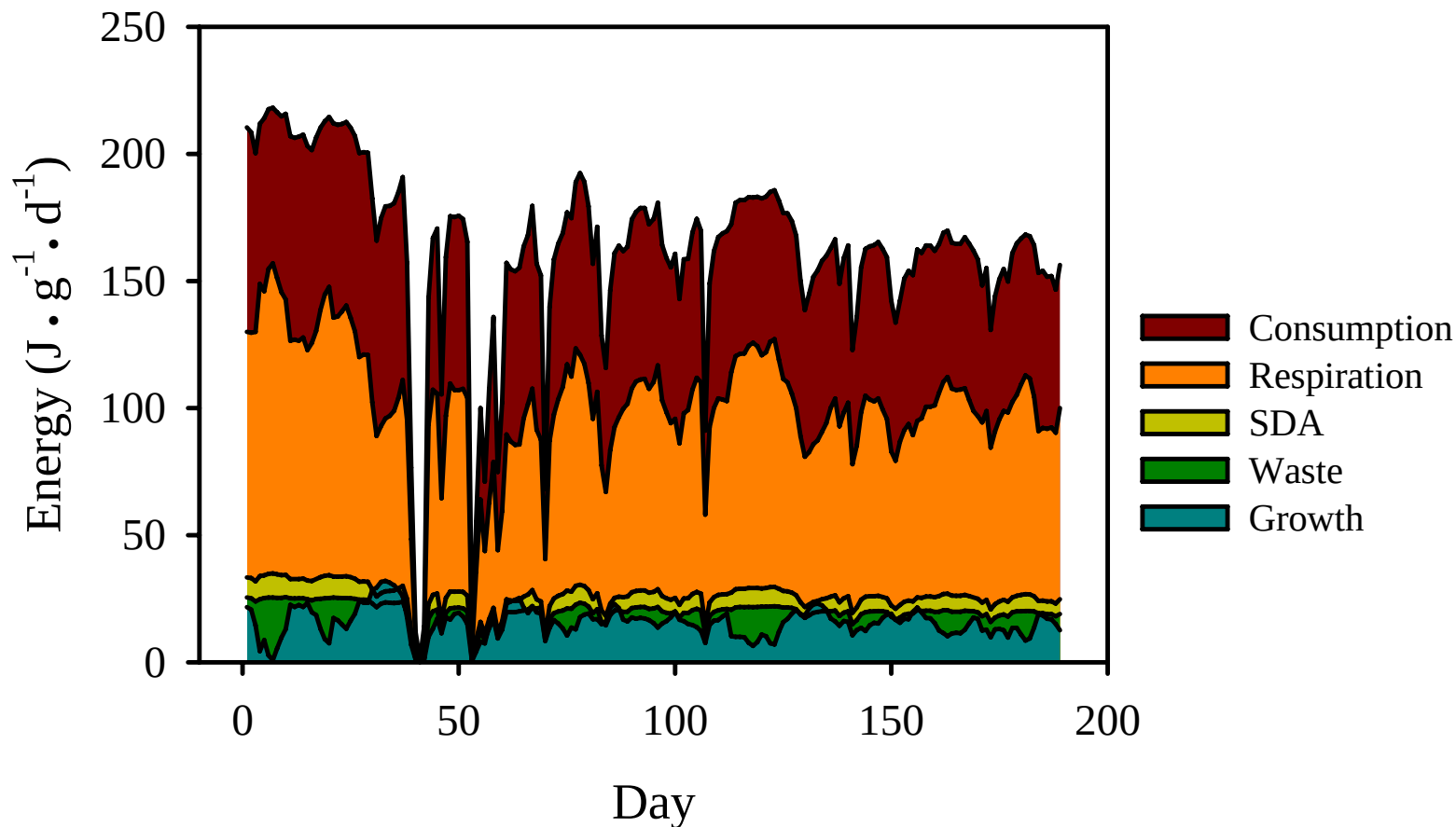


Cutthroat Trout Size Distribution (FL)





Energy Allocation by Cutthroat Trout Considering Turbidity



Thank you

