

ECOLOGY AND CONTROL OF INTRODUCED YELLOW PERCH IN BC LAKES



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BACKGROUND

Yellow perch in BC:

- Illegal introductions by sport fishers
- Generalist species
 - Diet generalists may have greater impact than diet specialists (Bohn and Amundsen 2001; Kolar and Lodge 2002)
- Predatory and omnivorous fish can impact native communities through diet and foraging habits (Bohn and Amundsen 2001; Rehage et al. 2005)
- Could impact rearing salmonids through predator prey interactions and interspecific competition

THE QUESTIONS

What lead to this research?

- Do yellow perch in BC lakes behave the same as they do in their native habitat?
- What potential level of impact could yellow perch have on larger lakes and native fish populations like salmon?

Need more information on introduced yellow perch in BC for management decisions

- Introduced species can rapidly adapt to new environments by exhibiting changes in behaviour and life history traits (Mooney and Cleland 2001).

FEEDING ECOLOGY

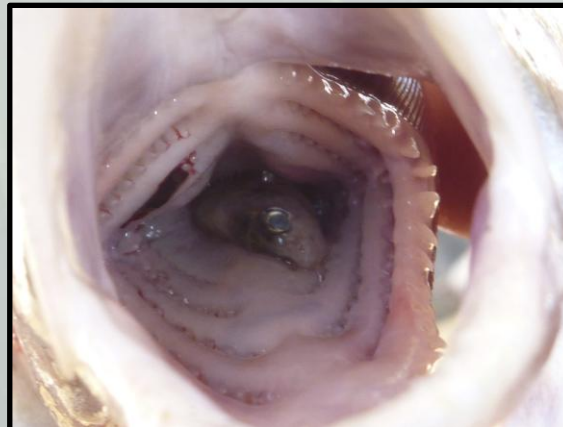


Preserving yellow perch stomach contents

Information on plasticity of introduced yellow perch diet will allow better assessment of niche breadth and invasive potential in BC lakes.



Analyzing stomach contents



Trout mouth with juvenile perch inside

MOVEMENT



Movement and general location shows overlapping distribution patterns with trout/native fish, and if they show similar patterns to perch in native habitat.



Radio transmitter implant in yellow perch

SPAWNING AND ARTIFICIAL SUBSTRATES



New “natural” design artificial spawning substrate for 2012 trials.



Snorkel observations in Swan Lake; looking for evidence of spawning, June 2011.

Artificial spawning substrate trials may provide new options for species control without use of rotenone.



Egg development in Pinaus Lake, Oct. 2011

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