

# MANAGEMENT OF THE PREDATOR PREY RELATIONSHIP BETWEEN AMERICAN WHITE PELICAN AND YELLOWSTONE CUTTHROAT TROUT



*Dan Schill & David Teuscher  
Idaho Dept. of Fish & Game*

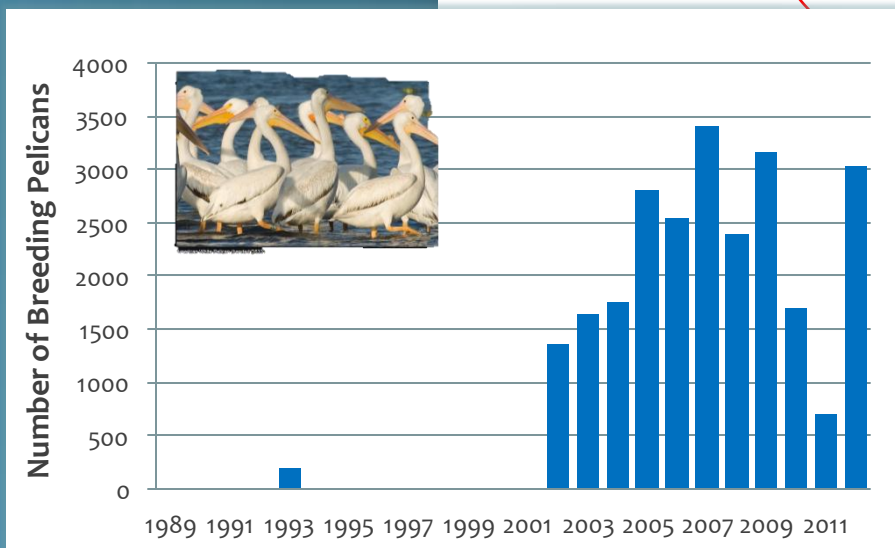
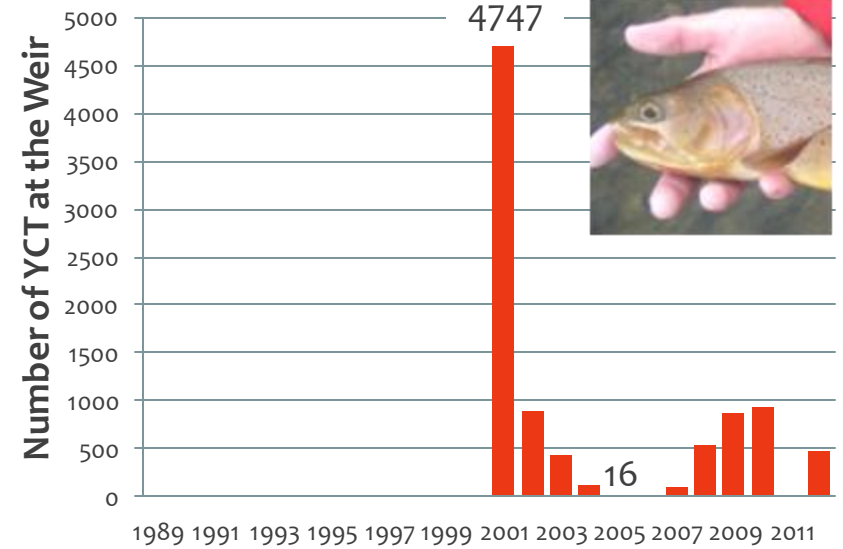
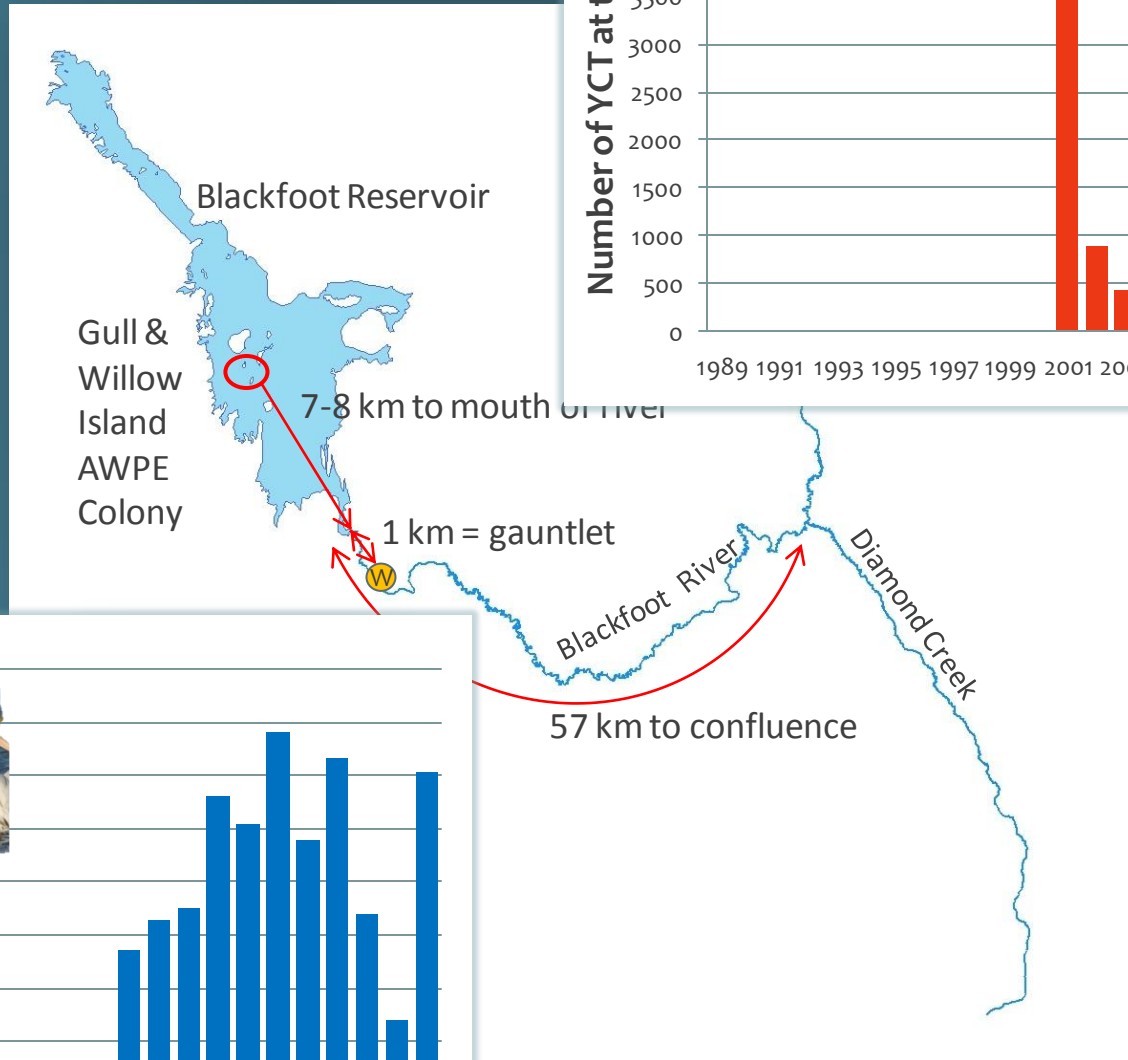


## BACKGROUND



- *Blackfoot reservoir constructed in 1912*
- *No AWPE colony on Gull Island prior to that date*
- *Predator removal from Gull Island in 1991-92*
- *First successful chick production in 1993*
- *Diet studies and bioenergetics suggest extensive salmonid use*
- *Blackfoot R YCT stock is one of the “Big 3”*
- *Unusually rich YCT dataset since late 1950’s*
- *Intense YCT fishery (humans) in the 1950’s to early 80’s resulted in overexploitation and collapse*
- *Catch & release regulations (river & res.) since late 1980’s = stock recovery*

# STUDY AREA



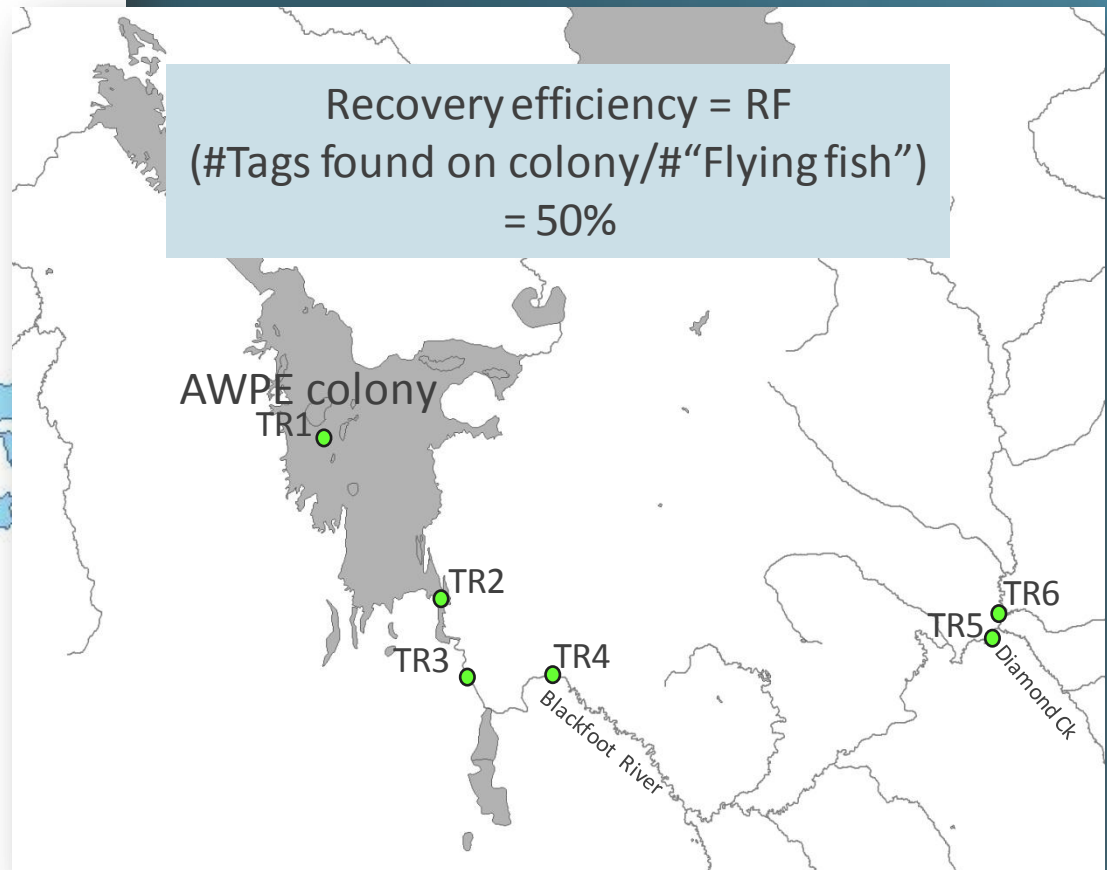


# TOTAL ADULT YCT PREDATION RATE ESTIMATES

Corrected for off-colony tag deposition  
2010 & 2011 (IDFG & Idaho State University)

## Adult spawners

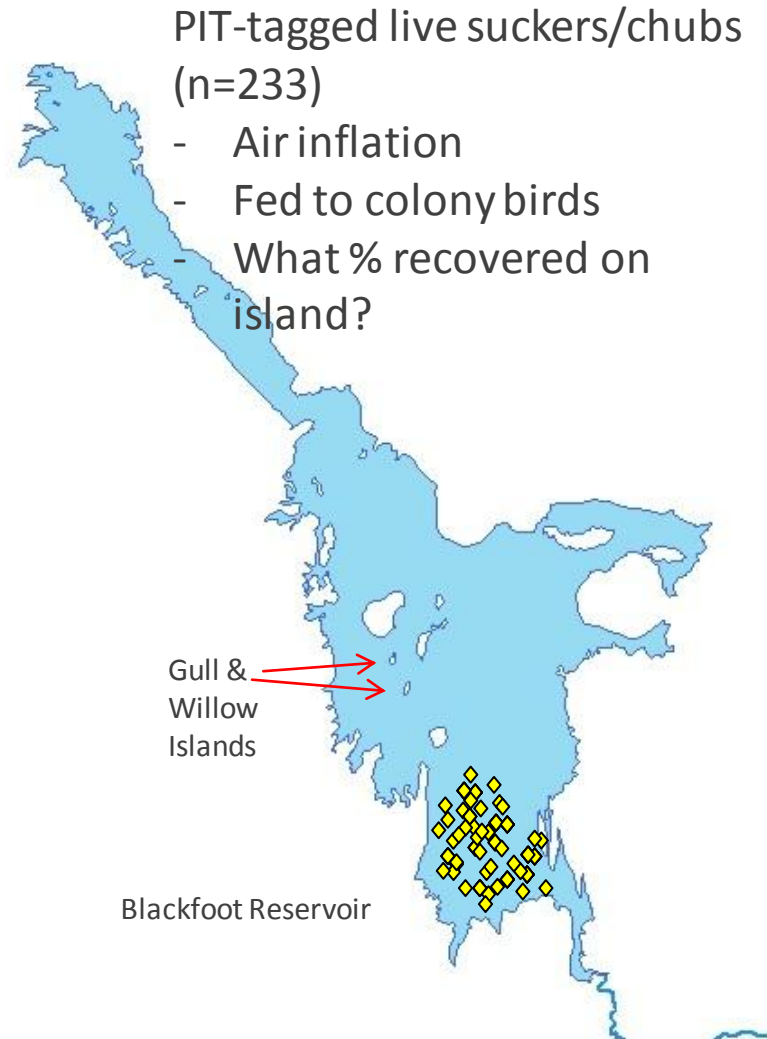
- Radio tagged in fall (n=88)
- 406mm+



# TOTAL JUVENILE YCT PREDATION RATE ESTIMATES

Also corrected for off-colony tag deposition

Recovery efficiency = Feed the birds



# YCT TOTAL PREDATION RATES



*2010 & 2011*

- *Juveniles 36-71%*
- *Adults 28-49%*
- *No gauntlet*



*2002 to 2005 pred rate  
with gauntlet???*



# MANAGEMENT ACTIONS

- 2010 badgers & skunks introduced onto Gull Island
- 2010-12 fencing of % nesting habitat
- Spring 2012 USFWS depredation permit for egg oiling
  - Oiled 429 nests (28% of total)



IDFG remains dedicated to balanced management

“Experience vs. evidence based science” Machado 2009