

Enos Lake 2008



Enos Lake Stickleback

Gasterosteus spp.

- Threespine stickleback, species pairs denoted as “limnetic” and “benthic”
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated as “endangered”
- Legally listed under the Species at Risk Act (SARA) 2005
- SARA Recovery Strategy posted on the SARA Public Registry 2007
- On the BC government Red List

Enos Lake Program 2008

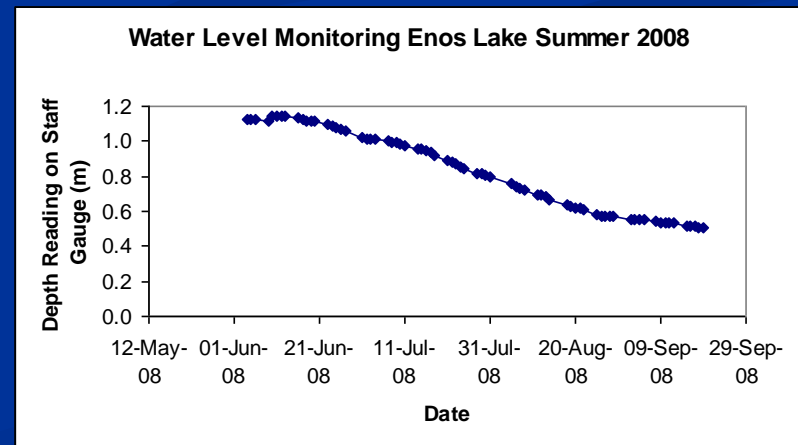
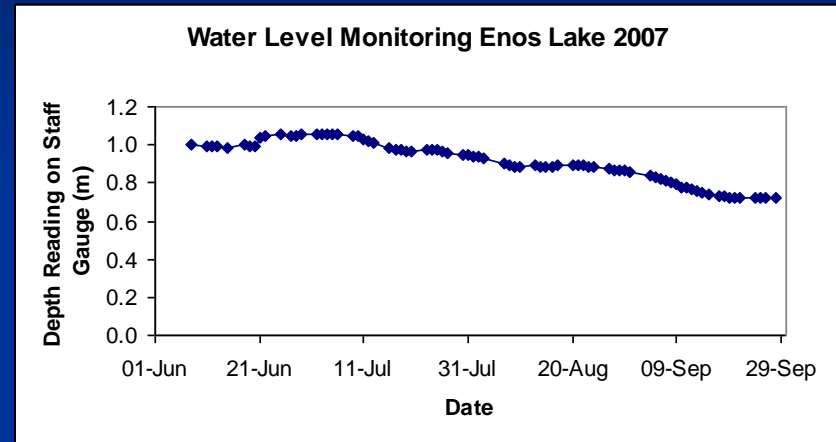
- Ecological Studies
 - Biophysical/chemical studies
 - Stickleback distribution and habitat
 - Crayfish removal
- Stewardship Projects

Vegetation Mapping

- Located all water based plants using GPS
- Inserted UTM coordinates into Surfer program digital map

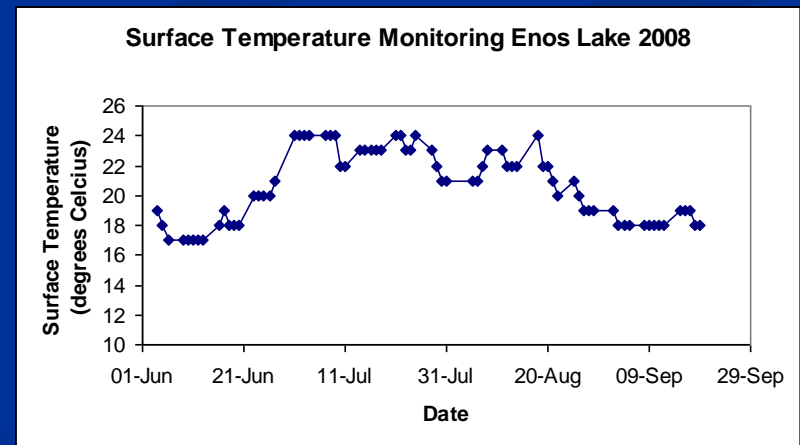
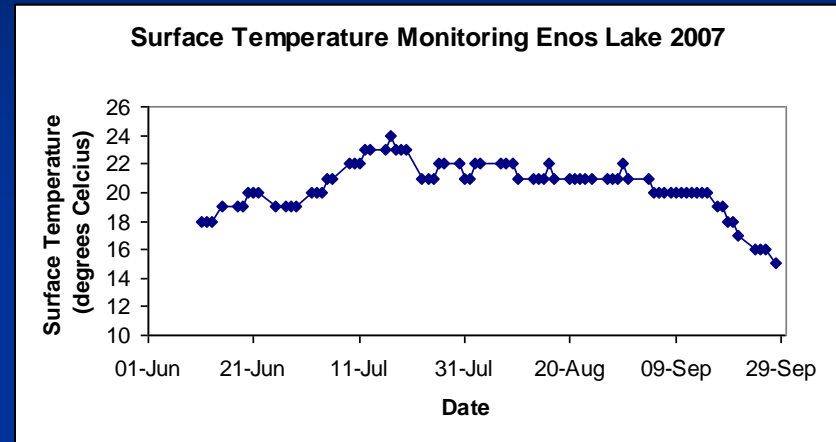
Daily Water Level Recording

- Water level
 - Decreased through summer
 - Dropped faster and more this year than last year



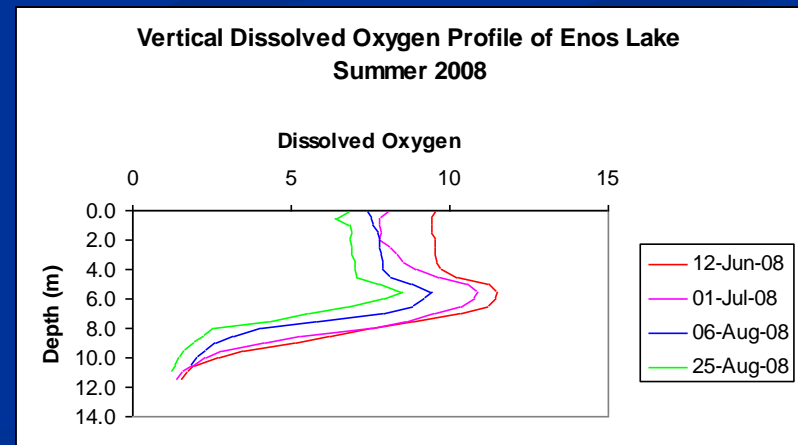
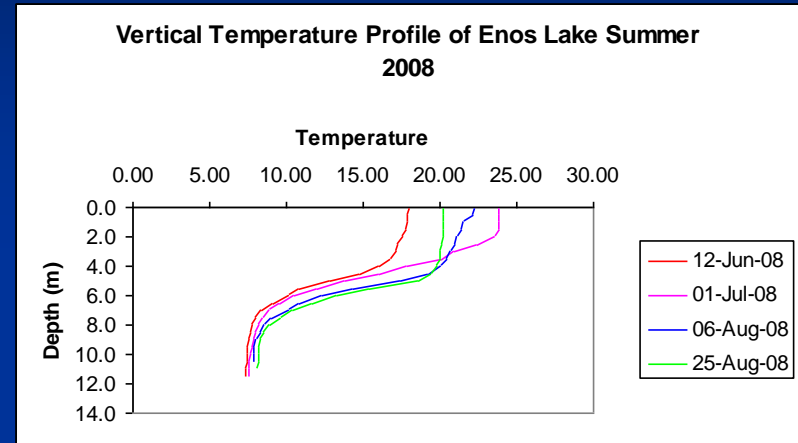
Daily Surface Temperature Recording

- Surface Temperature
 - Followed air temperature
 - Similar to last year



Water Quality Measurements

- Temperature:
 - Thermocline deepened
 - Cool bottom 4m
- Dissolved Oxygen
 - Less than 2mg/L in bottom 3m
 - Peak in early summer at 6m



Stickleback Species Pair

- Limnetic and Benthic
- Result of double invasion due to two glaciations
- Two different feeding strategies
- Look at eye size, face length, “hump” on back and body depth



Stickleback Distribution

- No distinct difference in depth preference between forms
- Caught less than 1/3 the number of fish using the same effort as last year
- The ratio of benthic:limnetic:hybrid in each depth is similar to last year

Crayfish

- Signal Crayfish
- Introduced to Enos Lake between 1981 and 1989
- In other lakes has been shown to destroy vegetation
- Last summer we estimated there were 34 000 in the lake



Crayfish Trapping

- Prawn & minnow traps
- Baited with cat food
- Random placement
- 24 hour soak
- We trapped with 84 traps for 55 days



Crayfish Removal

- Unable to remove all crayfish
- Total of 28 821 were removed over the summer
- Did not have a decline in catch per effort so we couldn't get a population estimate

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SARA Habitat Stewardship Program

Nanoose Naturalists

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Allana Patterson - treasurer

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Questions?

