

# Oahu Channel Angler Creel Surveys 2005-6 to 2013-14



•Photo taken 2009-10 survey

# Outline

1. The Surveys
2. Ohau Channel Survey findings
3. Oak records
4. Rotorua/Rotoiti trends



•Photo: 2009-10 survey

# Creel Surveys – Why and How

- To gauge angling statistics (catch rate/fish size/perceptions)
- Looking for changes in fishery to present to expert fishery panel
  
- 82 survey events over a season
- Based on a 'peak : off peak' ratio over key times of angling season (Opening to December and March to Closing)
- Same strategy as other Fish & Game surveys
  
- Perception parameters include (Catch rate along with Size and condition along with Angler Satisfaction)



# Ohau Channel Creel Surveys

|                              | 2005-06 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Survey events</b>         | 82      | 82      | 82      | 82      | 82      | 82      | 82      | 82      |
| <b>Nil angler encounters</b> | 3       | 17      | 22      | 28      | 19      | 15      | 38      | 32      |
| <b>Total Anglers</b>         | 576     | 496     | 373     | 518     | 412     | 270     | 163     | 216     |
| <b>Anglers per survey*</b>   | 7       | 8       | 6       | 10      | 7       | 4       | 4       | 4       |

- An increasing trend of 'no anglers' recorded
- A drop in the number of anglers surveyed



# Ohau Channel Creel Surveys

|                   | 2005-06 | 2007-08     | 2008-09 | 2009-10     | 2010-11     | 2011-12 | 2012-13 | 2013-14     |
|-------------------|---------|-------------|---------|-------------|-------------|---------|---------|-------------|
| Hrs fished        | 1099.1  | 934.15      | 728.10  | 1015.5      | 826.5       | 521.5   | 390.75  | 472.95      |
| Kept              | 349     | 371         | 212     | 394         | 125         | 94      | 73      | 126         |
| OSRT              | 102     | 24          | 42      | 221         | 90          | 33      | 15      | 83          |
| USRT              | 34      | 16          | 4       | 14          | 29          | 36      | 14      | 39          |
| CPUE(sum)         | 0.41    | 0.42        | 0.35    | <b>0.60</b> | <b>0.26</b> | 0.24    | 0.23    | <b>0.44</b> |
| HPUE(sum)         | 0.32    | 0.40        | 0.29    | 0.39        | 0.15        | 0.18    | 0.19    | 0.27        |
| ★ Avg indiv' cpue | 0.42    | <b>0.40</b> | 0.30    | <b>0.61</b> | <b>0.27</b> | 0.20    | 0.23    | <b>0.38</b> |

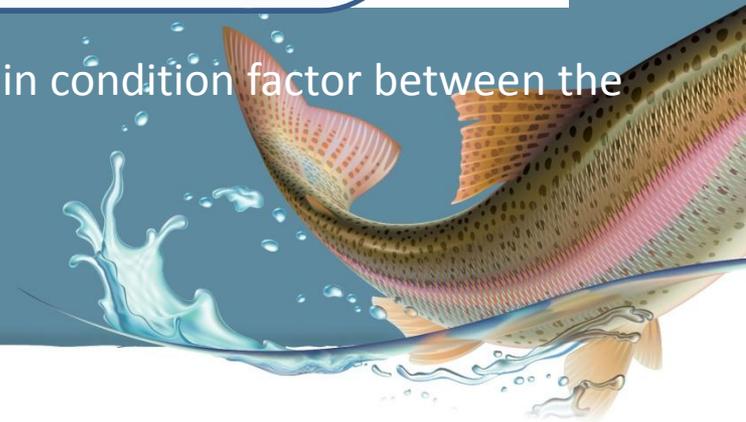
- Recorded angling hours have dropped especially after 2010-11 season
- There has been one very good season, one moderate season and 4 poorer seasons recorded since the wall was constructed



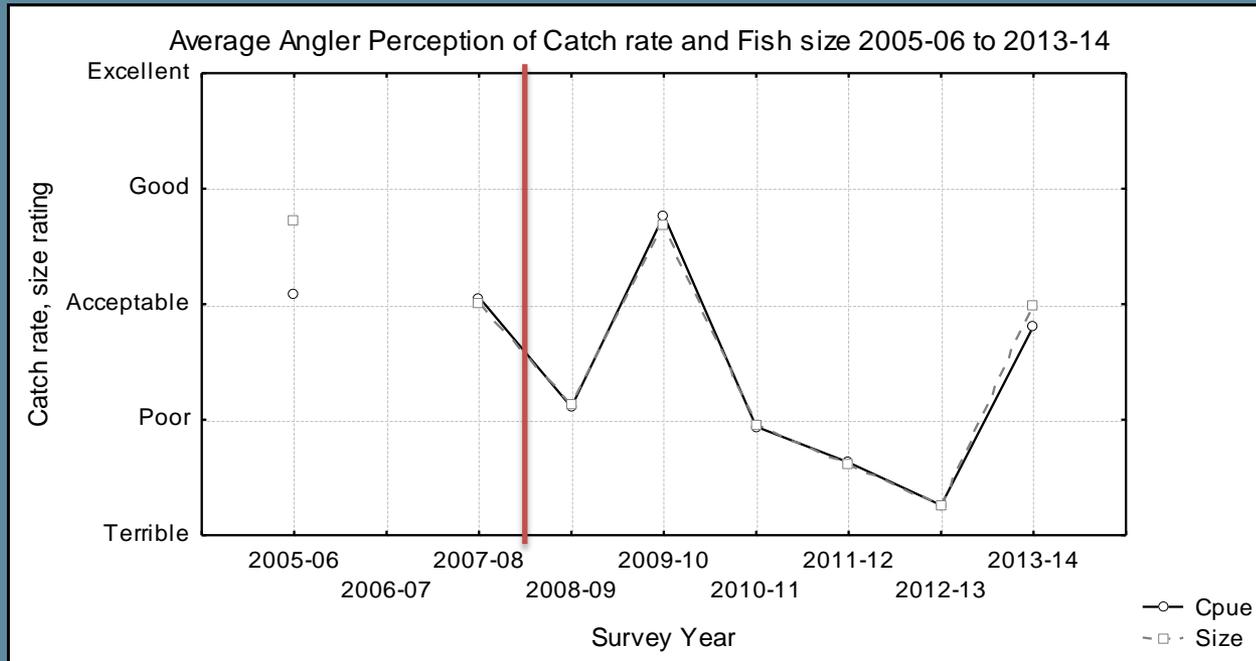
# Fish stats – Ohau Channel catch

|                | 2005-06 | 2007-08 | 2008-09      | 2009-10    | 2010-11      | 2011-12 | 2012-13      | 2013-14     |
|----------------|---------|---------|--------------|------------|--------------|---------|--------------|-------------|
| Brown length   | 662     | 675     | 702          | <b>650</b> | 672          | 669     | 614          | 645         |
| Brown weight   | 4.32    | 4.71    | 4.63         | 4.12       | 3.91         | 3.94    | <b>2.68</b>  | 3.75        |
| Brown c.f.     | 52.96   | 53.63   | <b>47.79</b> | 53.49      | 45.45        | 46.87   | <b>39.2</b>  | 50.36       |
| Rainbow length | 541     | 543     | 554          | <b>541</b> | <b>507</b>   | 516     | <b>492</b>   | <b>512</b>  |
| Rainbow weight | 2.25    | 2.30    | 2.22         | 2.11       | <b>1.56</b>  | 1.58    | 1.51         | <b>1.69</b> |
| Rainbow c.f.   | 50.09   | 50.98   | 46.10        | 47.19      | <b>41.55</b> | 40.39   | <b>44.06</b> | 44.57       |

- Both Brown trout and rainbow trout displayed a drop in condition factor between the 2009-10 and 2012-13 seasons.
- Both species were better during the 2013-14 season.

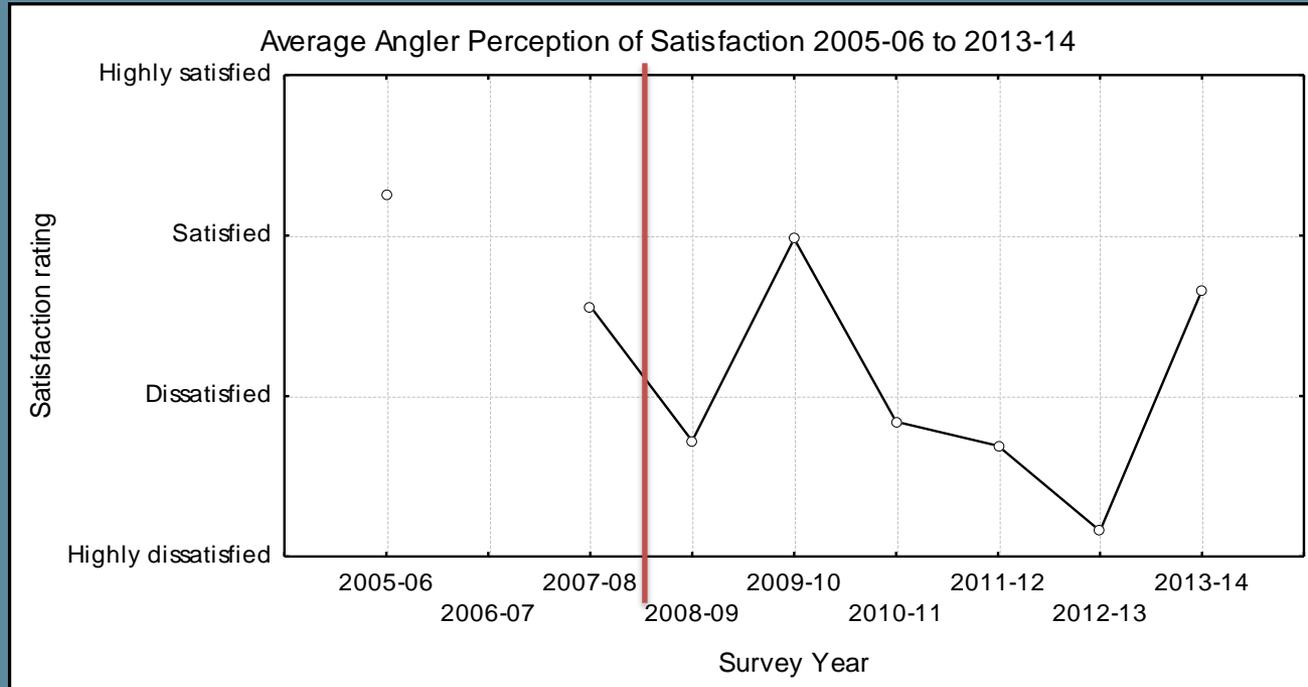


# Angler Perceptions (Cpue/ Size)



- 2 seasons post wall construction perceived acceptable to good for catch rates and fish condition
- 4 seasons post wall construction perceived as poor to terrible.

# Angler Perceptions (Satisfaction)



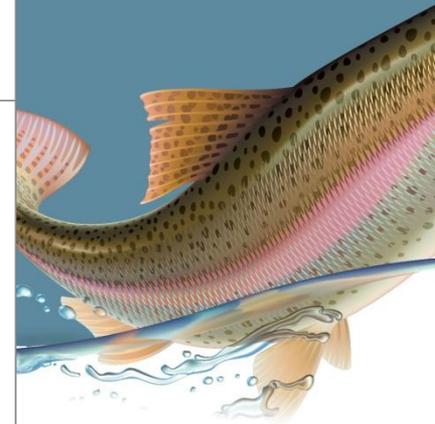
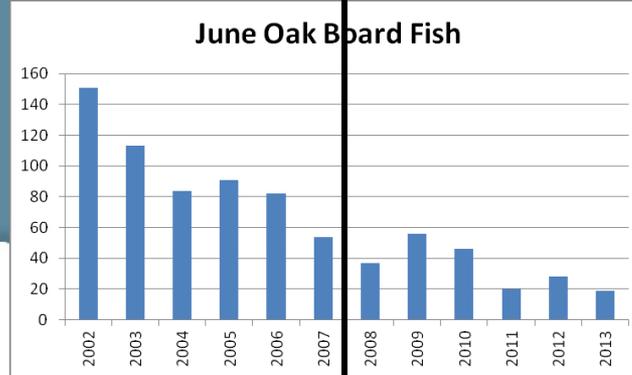
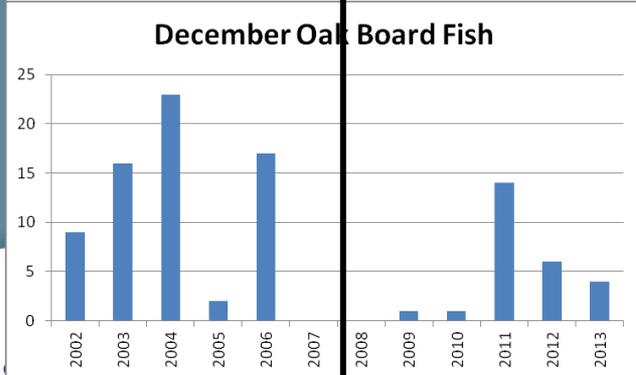
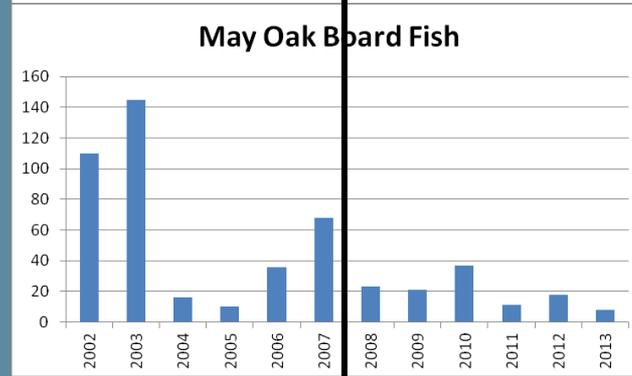
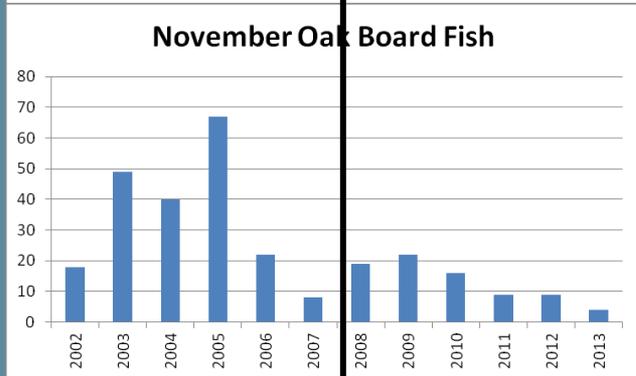
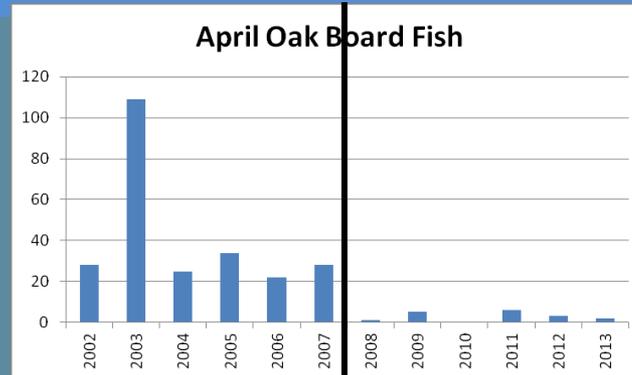
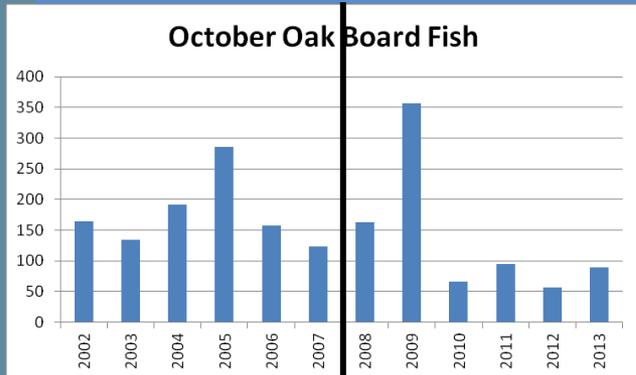
- 4 of the 6 seasons surveyed post wall indicated dissatisfied to highly dissatisfied anglers

# Oak Records (2002-2013)

Fish recorded on Oak board by month and year (caught in channel)

| <i>Total</i> | <b>Year</b> | <i>Oct</i> | <i>Nov</i> | <i>Dec</i> | <i>Jan</i> | <i>Feb</i> | <i>Mar</i> | <i>Apr</i> | <i>May</i> | <i>Jun</i> |
|--------------|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 503          | 2002        | 164        | 18         | 9          | 2          | 13         | 8          | 28         | 110        | 151        |
| 705          | 2003        | 135        | 49         | 16         | 0          | 23         | 115        | 109        | 145        | 113        |
| 406          | 2004        | 192        | 40         | 23         | 23         |            | 3          | 25         | 16         | 84         |
| 500          | 2005        | 286        | 67         | 2          | 7          | 2          | 1          | 34         | 10         | 91         |
| 380          | 2006        | 158        | 22         | 17         | 33         | 9          | 1          | 22         | 36         | 82         |
| 286          | 2007        | 124        | 8          |            | 3          |            | 1          | 28         | 68         | 54         |
| 254          | 2008        | 163        | 19         |            | 1          |            | 10         | 1          | 23         | 37         |
| 462          | 2009        | 357        | 22         | 1          |            |            |            | 5          | 21         | 56         |
| 190          | 2010        | 66         | 16         | 1          |            | 14         | 10         |            | 37         | 46         |
| 162          | 2011        | 95         | 9          | 14         | 4          | 3          |            | 6          | 11         | 20         |
| 136          | 2012        | 57         | 9          | 6          | 12         | 2          | 1          | 3          | 18         | 28         |
| 133          | 2013        | 90         | 4          | 4          |            | 3          | 3          | 2          | 8          | 19         |

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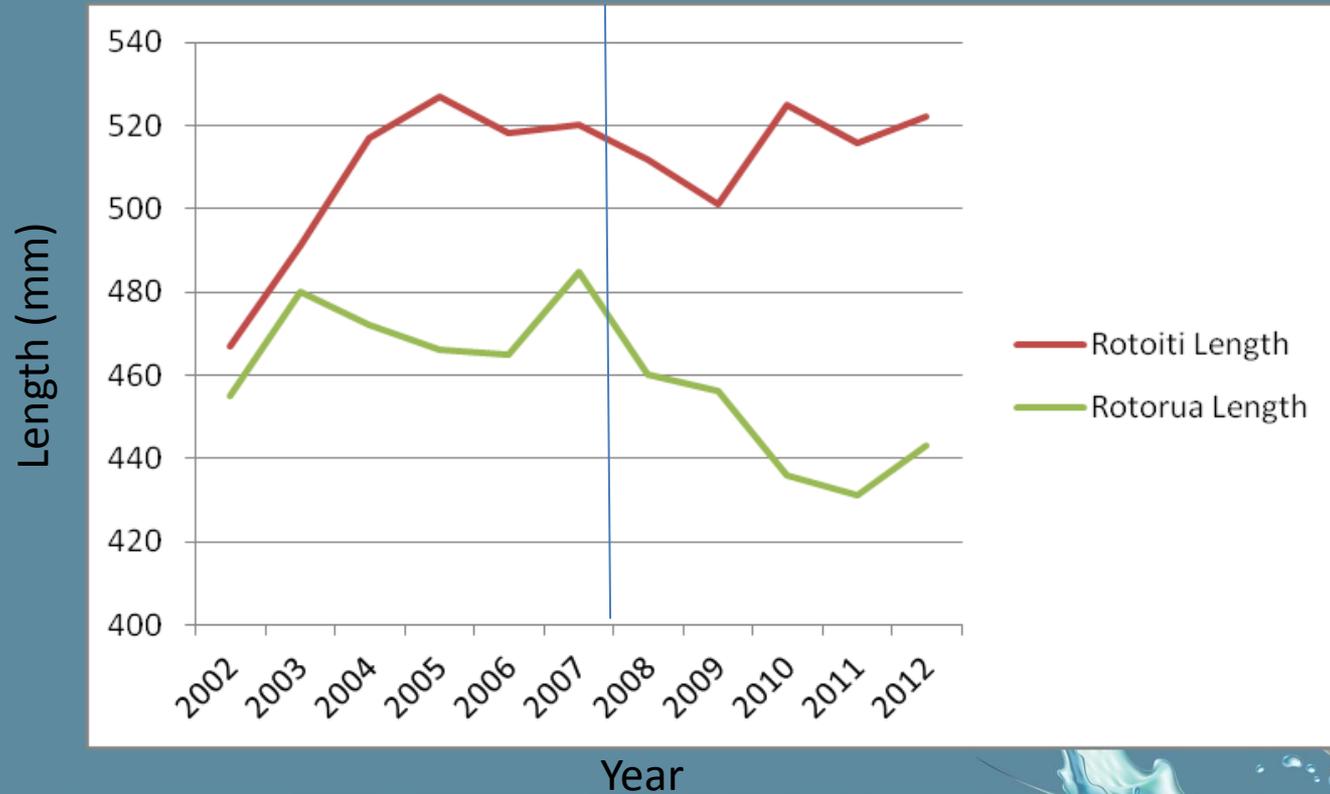
Fish recorded on Oak board by month and year (caught in channel)

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|     |                 |     |    |    |    |   |    |    |    |    |
|-----|-----------------|-----|----|----|----|---|----|----|----|----|
| 463 | <b>Pre Wall</b> | 177 | 34 | 11 | 11 | 8 | 22 | 41 | 64 | 96 |
| 223 | <b>PostWall</b> | 138 | 13 | 4  | 3  | 4 | 4  | 3  | 20 | 34 |

# Rotorua/Rotoiti trends

Rainbow trout length: Rotorua/Rotoiti (summer surveys)



# Rotorua/Rotoiti trends

Rainbow trout condition: Rotorua/Rotoiti (summer surveys)

