**Back Rockfish maturity analysis**

Figures from preliminary maturity analysis

Data included in figures are from samples collected by ODFW 2014-2021 (n = 320), maturity analysis by Melissa Head. Figures do not include data from samples collected by Claire Rosemond at OSU.

Chart, line chart

Description automatically generated

Chart, line chart

Description automatically generated

*L50*, standard logistic regression results (preliminary)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year  (spawning season) | Source | n\* | *L50*bio (95% CI) | *L50*func (95% CI) | *L50* change from bio to func |
| 2014-2021 | MH/ODFW | 320 | 34.12 (1.11) | 41.57 (0.99) | 21.8% increase |
| 2015 only | CR/OSU | 95 | 35.55 (3.96) | 40.83 (3.12) | 14.8 % increase |

\*Includes only samples collected September through April

Preliminary maturity analysis summary

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year  (spawning season) | Source | n\* | Prop mass atresia\*\* | Prop bio mat | Prop func mat | Size range (cm) | Mean size (cm) |
| 2014-2015 | MH/ODFW | 50 | 0.28 | 0.80 | 0.32 | 36-52 | 41.8 |
| 2015-2016 | MH/ODFW | 71 | 0.13 | 0.69 | 0.30 | 33-56 | 41.3 |
| CR/OSU | 95 | 0 | 0.85 | 0.58 | 34-58 | 41.9 |
| 2016-2017 | MH/ODFW | 78 | 0.14 | 0.86 | 0.41 | 27-47 | 38.9 |
| CR/OSU | 90 |  |  |  |  |  |
| 2017-2018 | CR/OSU | 35 |  |  |  |  |  |
| 2018-2019 | CR/OSU | 27 |  |  |  |  |  |
| 2019-2020 | MH/ODFW | 50 | 0.06 | 0.68 | 0.44 | 31-50 | 39.1 |
| CR/OSU | 87 |  |  |  |  |  |
| 2020-2021 | MH/ODFW | 71 | 0.11 | 0.79 | 0.62 | 27-55 | 41.1 |
| CR/OSU | 19 |  |  |  |  |  |
|  | **Total** | **673** |  | | | | |

\*Includes only samples collected September through April, \*\*Mass atresia defined as level 3-5 (≥25%) from non-post spawning fish

Preliminary parasite analysis summary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year  (spawning season) | Source | n\* | n\* with parasites | Prop with parasites | Prop with inflammation\*\* | Prop with either/or parasite/inflammation |
| 2014-2015 | MH/ODFW | 50 | 5 | 0.10 | 0.10 | 0.14 |
| 2015-2016 | MH/ODFW | 71 | 16 | 0.23 | 0.11 | 0.30 |
| CR/OSU | 95 | 3 | 0.03 | 0.03 | 0.06 |
| 2016-2017 | MH/ODFW | 78 | 5 | 0.06 | 0.05 | 0.08 |
| CR/OSU | 90 | 4 | 0.04 | 0.04 | 0.06 |
| 2017-2018 | CR/OSU | 35 | 5 | 0.14 | 0.06 | 0.17 |
| 2018-2019 | CR/OSU | 27 | 0 | 0 | 0.04 | 0.04 |
| 2019-2020 | MH/ODFW | 50 | 4 | 0.08 | 0.02 | 0.08 |
| CR/OSU | 87 | 7 | 0.08 | 0.02 | 0.08 |
| 2020-2021 | MH/ODFW | 71 | 6 | 0.08 | 0.10 | 0.15 |
| CR/OSU | 19 | 4 | 0.21 | 0 | 0.21 |
|  | **Total** | **673** | **59** | **0.09** |  |  |

\*Includes only samples collected September through April, \*\*Inflammation refers to granulosa inflammation or granulomas