

Bjornn & Reiser1991: Dissolved Oxygen and Coho Salmon Embryo

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Species Information

Common Name: Coho Salmon

Genus: *Oncorhynchus kisutch*

Stressor Details

Stressor Name: Dissolved Oxygen

Units: mg/L

Metric: Dissolved Oxygen Concentration

Scale: linear

Function Type: continuous

Vital Rate/Process: Survival

Life Stage & Context

Life Stages: Egg

Activity: Incubation

Descriptions

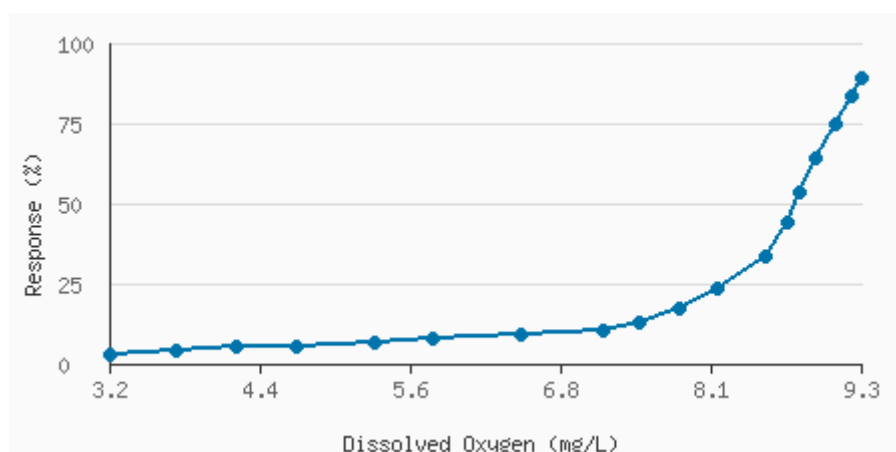
Overview

Relation between dissolved oxygen concentration and survival of coho salmon embryos in natural redds.

Function Derivation

field study

Stressor Response Data



| Stressor (X) | Mean System Capacity (%) | SD | low.limit | up.limit |
|--------------|--------------------------|------|-----------|----------|
| 3.16 | 3.06 | 3.67 | 0 | 100 |
| 3.7 | 4.29 | 3.27 | 0 | 100 |
| 4.19 | 5.1 | 5.71 | 0 | 100 |
| 4.68 | 5.51 | 5.31 | 0 | 100 |

| | | | | |
|------|-------|-------|---|-----|
| 5.32 | 6.33 | 8.16 | 0 | 100 |
| 5.8 | 7.55 | 6.94 | 0 | 100 |
| 6.52 | 9.18 | 6.94 | 0 | 100 |
| 7.19 | 10.41 | 20.41 | 0 | 100 |
| 7.48 | 12.86 | 17.96 | 0 | 100 |
| 7.81 | 17.35 | 26.53 | 0 | 100 |
| 8.12 | 23.47 | 20.41 | 0 | 100 |
| 8.51 | 33.67 | 31.43 | 0 | 100 |
| 8.68 | 44.29 | 44.08 | 0 | 100 |
| 8.79 | 53.27 | 35.1 | 0 | 100 |
| 8.92 | 64.29 | 34.69 | 0 | 100 |
| 9.07 | 74.49 | 25.31 | 0 | 100 |
| 9.2 | 83.47 | 16.73 | 0 | 100 |
| 9.28 | 88.78 | 11.43 | 0 | 100 |
| 9.28 | 88.78 | 11.43 | 0 | 100 |

Citations

Bjornn, T. C., & Reiser, D. W. (1991). Habitat requirements of salmonids in streams. American Fisheries Society Special Publication, 19(837), 105.

References

https://www.for.gov.bc.ca/hfd/LIBRARY/FFIP/Bjornn_TC1991.pdf -
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