

# Bjornn & Reiser1991: Dissolved Oxygen and Coho Salmon Embryo

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Function Updated by mbayly on Tue, 02/17/2026 - 21:39.

## 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

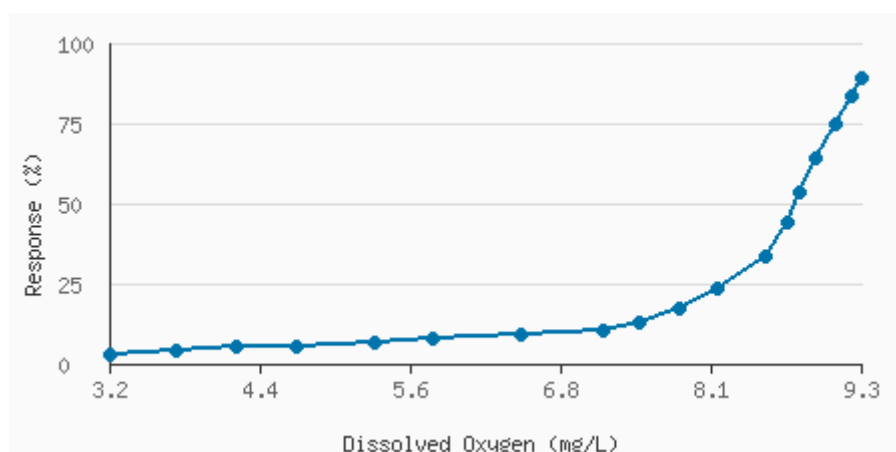
### Overview

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

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

## References

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[https://www.for.gov.bc.ca/hfd/LIBRARY/FFIP/Bjornn\\_TC1991.pdf](https://www.for.gov.bc.ca/hfd/LIBRARY/FFIP/Bjornn_TC1991.pdf) -  
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