



Gill Lice

Allen Keim II – Fisheries Technician
Cooperative Nursery Unit

Mission: To protect, conserve, and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities

Overview

- What Are Gill Lice
- Life Cycle
- Cooperative Nursery
- Further Information



Salmincola edwardsii

- Nearctic Distribution
 - Majority of US
- Native to PA
- Host Specific
 - *Salvelinus* species
 - Experimental Research



Life Cycle

- Five Stages
 - Egg – Adult
 - 60 – 75 days
- Sexual Dimorphism
 - Females Twice as Large
- Dioecious Organisms
 - Distinction Between Sexes



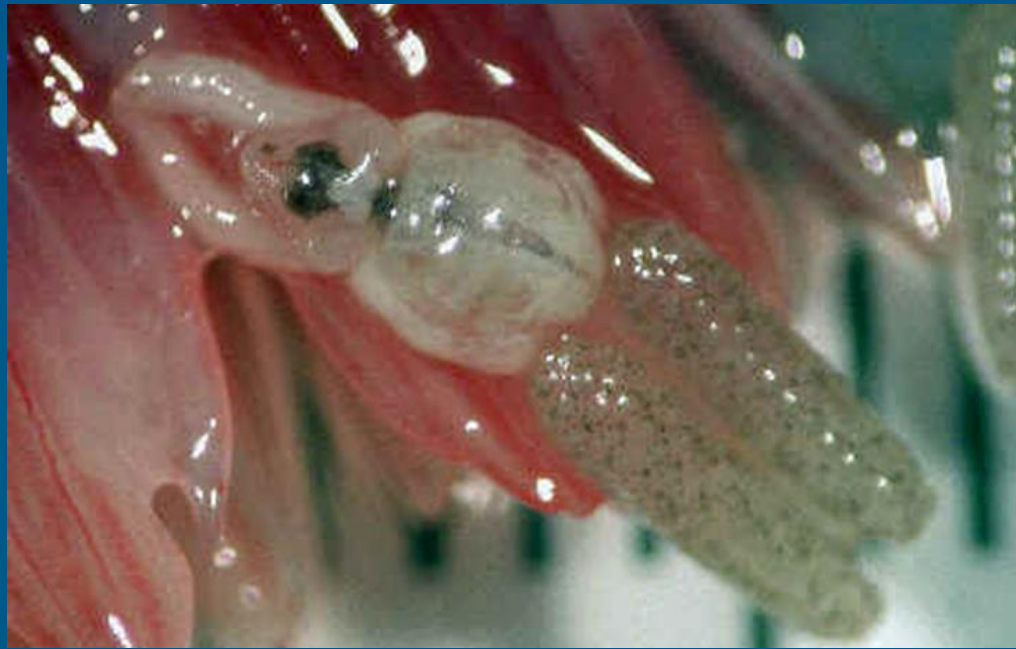
Larval Stage

- 4 Distinct Larval Stages
- Free Swimming
- Attaches to Host
 - Survival Time is Temperature Dependent
- Larvae Lives in Substrate
 - Emerge at Sunset

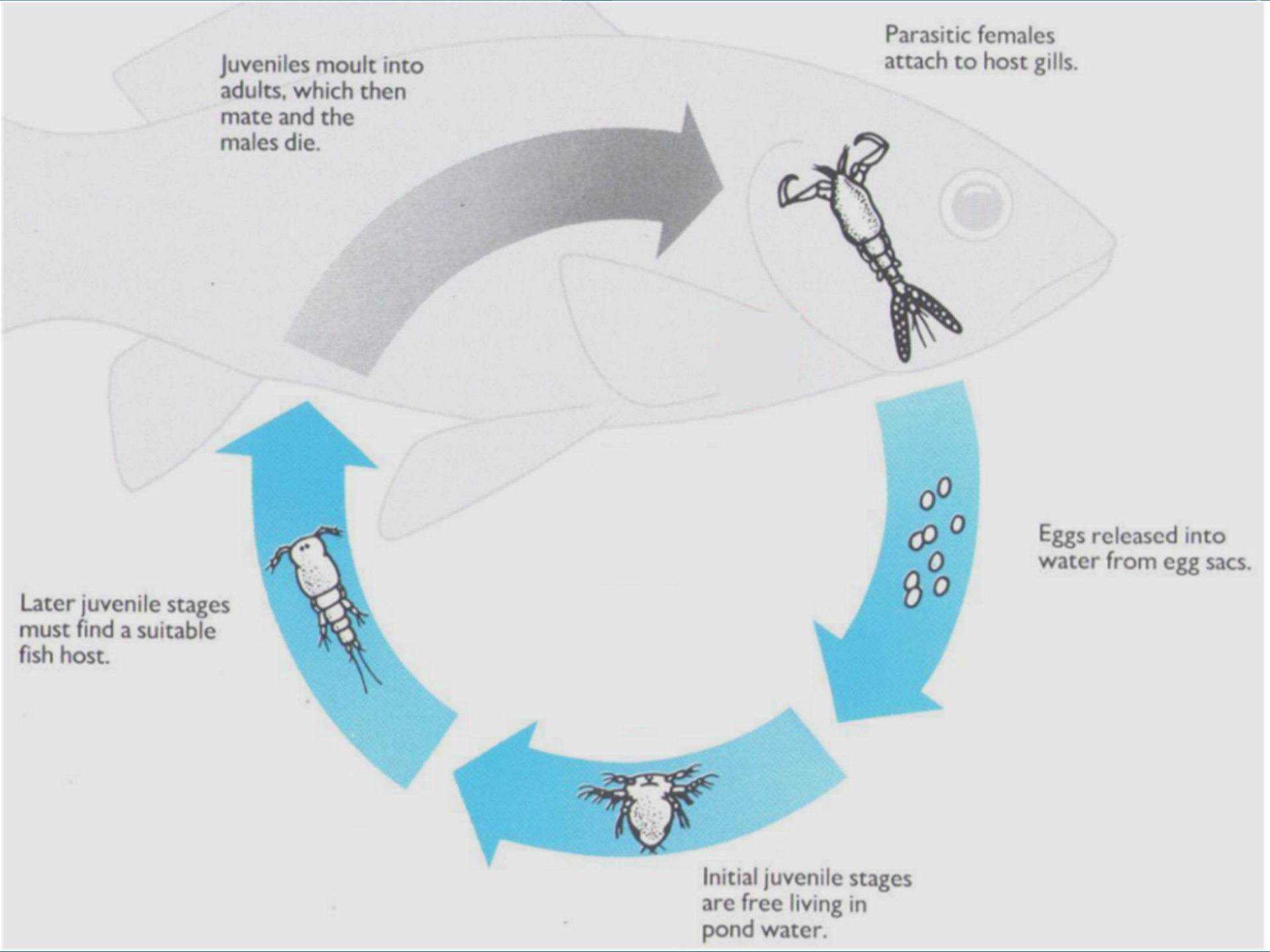


Adult Stage

- Visible to Naked Eye
 - 2.5 – 8 mm
- Attached to Host
 - Bulla
- Female Develops Eggs
 - Rupture to Release
- Heaviest Infestation Mid-Late Summer







Cooperative Nursery

- Observed at Nursery
- Depopulated and Disinfected
- Gill Lice Management Plan
 - Rainbow Trout
- Continued Monitoring
- Continuous Operation



Sponsor Responsibilities

- Report to CNU Immediately
 - Send Picture(s)
- Do Not Stock/Transfer Fish
 - CNU Policy
- Protocol In Place
 - FHU, AFM, CNU



Wisconsin Research

- Brook Trout
 - Warm, Dry Summer Increased Prevalence
- Population Impacted
 - YOY Infected
 - Decreased Density of BKT
- Impact Increased in Presence of BNT
 - Out-Compete BKT



Salmincola californiensis

- Native to Pacific Coast
- Host Specific
 - *Oncorhynchus Sp.*
- Aquatic Invasive Species
- Life Cycle Similar to *S. edwardsii*



Recent Issue

- Angler Reported RBT with Gill Lice
 - Montgomery County Lake
- Traced to Private Aquaculture Facility
 - Upstream of Cooperative Nursery
- CNU Observed Gill Lice at Nursery
 - Only on RBT
- Depopulated RBT at Nursery



Questions?

