# *Great Lakes Sea Lamprey: From Crisis to Control*

Video worksheet

## Section 1: What are sea lampreys? (fill-in-the-blank)

**Word Bank:** cartilaginous one jawless blood 2.5 40 walleye invasive lake trout

1. Sea lampreys are an _____ species in the Great Lakes, meaning they are not native to this ecosystem.
2. Sea lampreys feed on the _____ of other fish.
3. Two species of native Great Lakes fish that sea lampreys parasitize are _____ and _____.
4. In some cases, only _____ out of seven fish will survive a sea lamprey attack.
5. A sea lamprey kills up to _____ pounds of fish in its life.
6. Before control began there were approximately _____ million sea lampreys in the Great Lakes.
7. A sea lamprey's mouth is _____.
8. Sea lampreys have a _____ skeleton, like sharks, which makes them highly flexible.

## Section 2: History (matching)

1. Lampreys are "living fossils" and have been around since before the:
2. Sea lampreys are native to the:
3. Man-made shipping canals allowed sea lampreys to invade the:
4. Sea lampreys invaded all of the Great Lakes by the late:
5. In 4 out of the 5 Great Lakes, lake trout were:
6. Research station where sea lamprey control research began:
7. Since control began in the Great Lakes, sea lamprey numbers have dramatically:

A. Great Lakes

B. decreased

C. dinosaurs

D. eliminated

E. 1930s

F. Atlantic Ocean

G. Hammond Bay Biological Station

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## Section 3: Life cycle (multiple choice)

1. Sea lampreys spawn in the:
   (a) fall (b) winter (c) summer (d) spring
2. Sea lampreys use their _____ to move rocks around and build a nest.
   (a) tails (b) gills (c) mouths (d) fins
3. The sea lamprey's scientific genus, *Petromyzon*, means:
   (a) rock sucker (b) fast swimmer (c) blood loving (d) good smeller
4. A sea lamprey spawns how many times in its life?
   (a) 40 (b) 1 (c) 4 (d) 100
5. Each female sea lamprey can produce up to how many eggs?
   (a) 1 (b) 100 (c) 1,000 (d) 100,000
6. Sea lampreys undergo a metamorphosis and then swim out into the larger lakes to feed on:
   (a) algae (b) fish blood (c) plankton (d) mussels
7. The control program mainly targets the adult and _____ life stages.
   (a) larval (b) parasitic (c) egg (d) newly metamorphosed

## Section 4: Control (choose the answer)

1. The sea lamprey control program is one of the _____ invasive species control programs in the world. (best/worst)
2. Larval sea lampreys are controlled through the application of _____. (detergent/lampricides)
3. Lampricides are _____, meaning they target sea lamprey larvae without harming other organisms. (durable/selective)
4. The ultimate goal of the control program is to maintain _____ populations of fishery species in the Great Lakes. (stinky/healthy)
5. Biologists tested over 6,500 different chemicals and found _____ selective lampricides. (2/2,500)
6. The main lampricide used in sea lamprey control is _____. (TFM/ABC)
7. A network of _____ around the Great Lakes blocks adult sea lampreys from accessing spawning areas in streams. (mazes/barriers)
8. _____ is a control method in development. (trapping/measuring)
9. Control efforts have reduced sea lamprey populations by _____ across the Great Lakes. (90%/10%)

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2. Sea lampreys feed on the ___blood___ of other fish.
3. Two species of native Great Lakes fish that sea lampreys parasitize are ___walleye___ and ___lake trout___.
4. In some cases, only __one__ out of seven fish will survive a sea lamprey attack.
5. A sea lamprey kills up to __40__ pounds of fish in its life.
6. Before control began there were approximately __2.5__ million sea lampreys in the Great Lakes.
7. A sea lamprey's mouth is ___jawless___.
8. Sea lampreys have a ___cartilaginous___ skeleton, like sharks, which makes them highly flexible.

## Section 2: History (matching)

1. Lampreys are "living fossils" and have been around since before the: (C)
2. Sea lampreys are native to the: (F)
3. Man-made shipping canals allowed sea lampreys to invade the: (A)
4. Sea lampreys invaded all of the Great Lakes by the late: (E)
5. In 4 out of the 5 Great Lakes, lake trout were: (D)
6. Research station where sea lamprey control research began: (G)
7. Since control began in the Great Lakes, sea lamprey numbers have dramatically: (B)

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