



## Fish finders

### Lesson 2: Smelt

#### Data Sheet

Use water temperature and discharge data and what you know about smelt --- to answer the following questions

You are planning a smelt dip-netting trip in the Salmon Trout River in Michigan's Upper Peninsula. Use what you know about the relationship between smelt spawning, weather and water temperatures to plan your trip.

1. The best time to dip-net smelt is when they move from lakes to tributaries to spawn. Smelt spawn in the spring when the water temperatures reach 5-7 °C (42-44 °F).  
When did water temperatures warm to 5-7 °C (42-44 °F) in the Salmon Trout River?

In 2006? \_\_\_\_\_

In 2007? \_\_\_\_\_

In 2008? \_\_\_\_\_

2. Rain also influences smelt spawning. Smelt typically spawn after continued rains during or just after the spring thaw (when water temperatures reach 5-7°C (42-44 °F)). Using water discharge data, when did these spring rains occur during previous years?  
\*Hint: Water discharge increases during spring thaw especially after rain\*

In 2006? \_\_\_\_\_

In 2007? \_\_\_\_\_

In 2008? \_\_\_\_\_



3. Smelt move from lakes into tributaries in early spring when water temperatures reach 5-7 °C (42-44 °F). Spawning often begins after consistent warming rain showers. Using answers from #1 and #2 above, determine the day it was most likely smelt spawning began each year.

In 2006? \_\_\_\_\_

In 2007? \_\_\_\_\_

In 2008? \_\_\_\_\_

4. Spawning often occurs after a spring rain when water temperatures have reached 5-7 °C (42-44 °F). During which year were conditions most suitable for smelt spawning? Support your conclusion using evidence from water temperature and discharge data.

5. Based on what you know about water temperature and precipitation trends on the Salmon Trout River between 2006 – 2008, when do you think smelt will spawn this year? Circle and explain your prediction.

- April 1-7
- April 8-15
- April 16-22
- April 23-30
- May 1-7
- May 8-15
- May 16-22
- May 23-31