

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the slide.

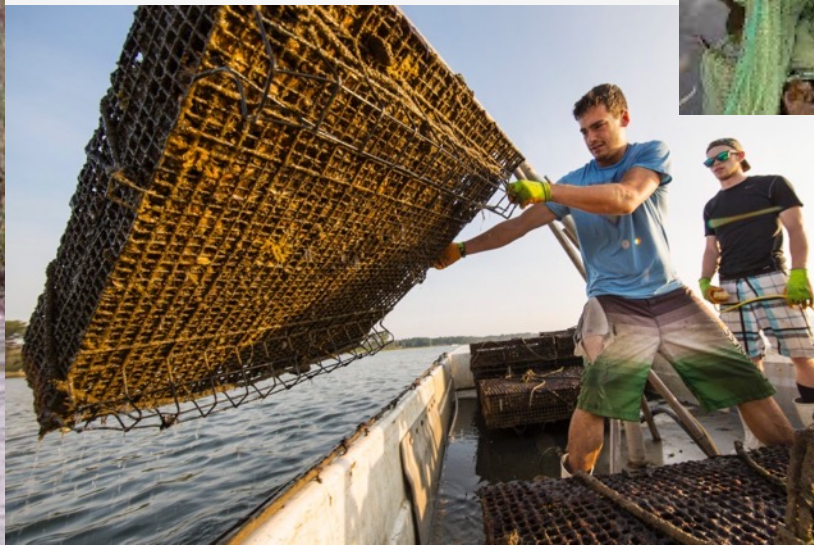
LEAP FISHERIES MANAGEMENT

WHAT IS FISHERIES MANAGEMENT?

- WHAT ARE FISHERIES?
- WHAT DOES MANAGEMENT MEAN?



Photo by James C. Cathey

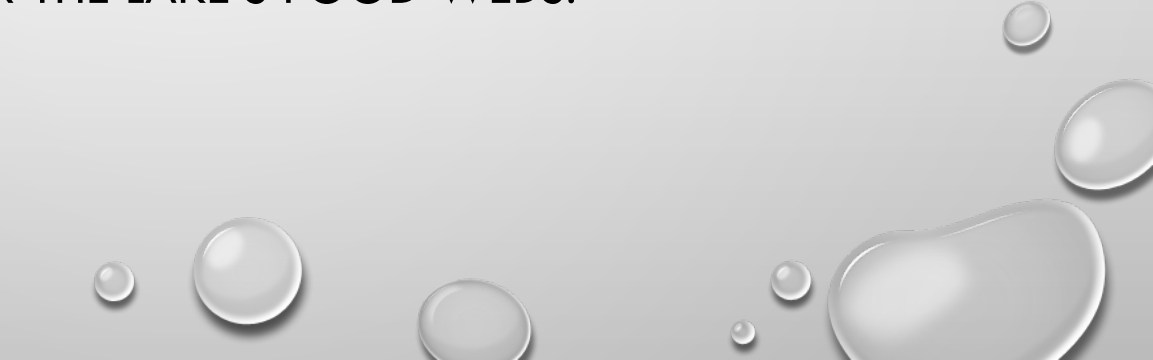


WHY MONITOR FISH POPULATIONS?

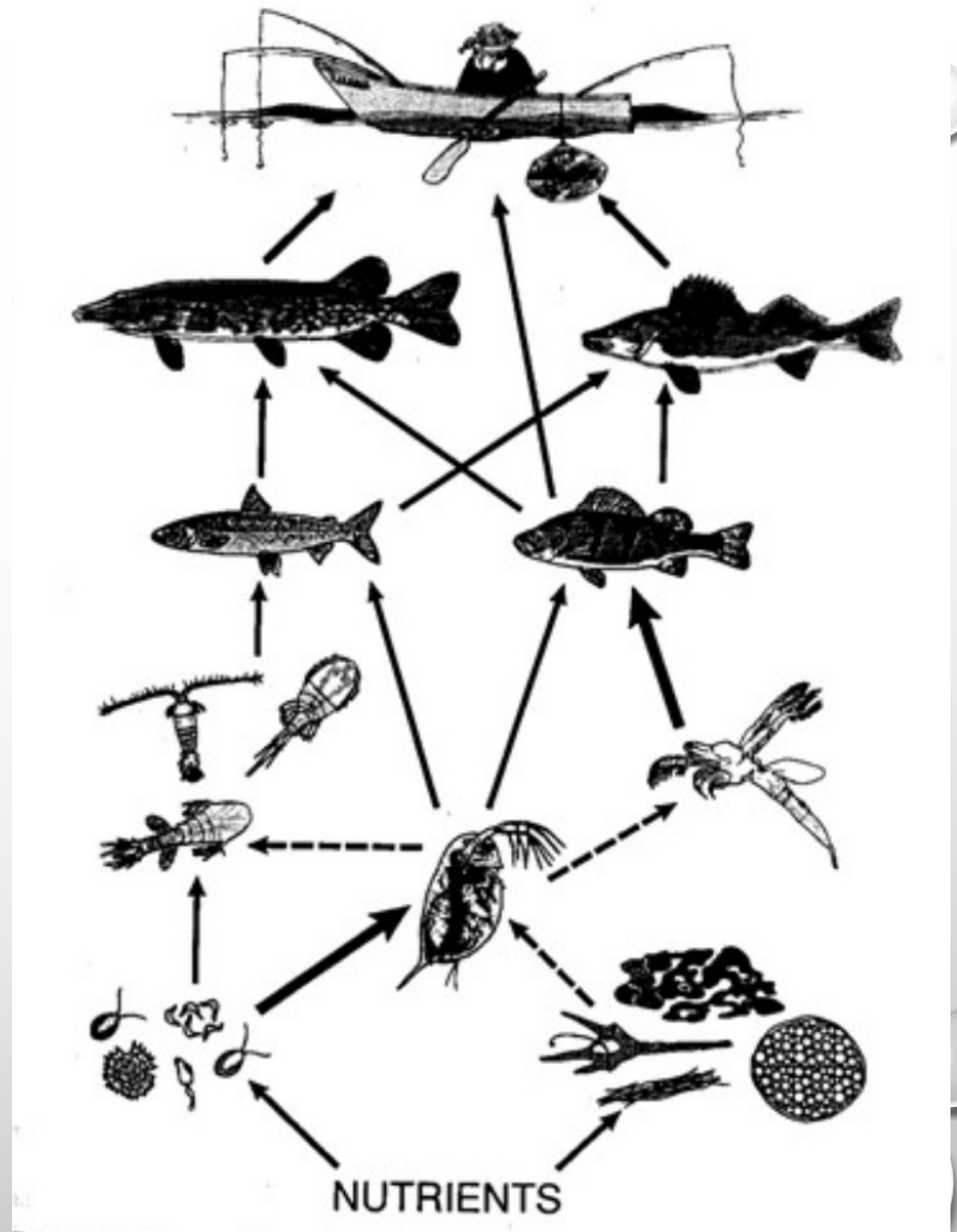




• WHY MONITOR FISH POPULATIONS?

- UNDERSTAND HOW MANY FISH THERE ARE
 - TRACK MIGRATION OR MOVEMENT OF FISH
 - SEE WHICH HABITATS ARE BEING USED
 - DOCUMENT WHERE AND WHEN FISH BREED
-
- FISH ARE IMPORTANT FOR THE LAKE'S FOOD WEBS!
- 

WHY ARE FISH IMPORTANT FOR LAKE FOOD WEBS?





FISHERY MANAGER GOALS ARE TO:

**1) KEEP FISH POPULATIONS AT A LEVEL
WHERE THE ECOSYSTEM IS BALANCED**

**2) BALANCE WHAT PEOPLE WANT TO
FISH, CONSUME, AND USE WITH
NATURAL PROCESSES**



WHY REGULATE FISH POPULATIONS?

- WHAT WOULD HAPPEN IF TOO MANY FISH WERE REMOVED FROM THE LAKE?
- WHAT WOULD HAPPEN IF TOO MANY WERE LIVING IN THE LAKE?



WHAT FACTORS AFFECT FISH POPULATIONS?



WHAT FACTORS AFFECT FISH POPULATIONS?

- HUMAN ANGLING
- BREEDING/REPRODUCTION
- PREDATOR/PREY RELATIONSHIPS
- FOOD AVAILABILITY
- SIZE OF THE POPULATION
- HOW BIG THE FISH ARE (MOSTLY OLD, MOSTLY YOUNG)
- HABITATS THAT ARE AVAILABLE

panfish

Energy for
panfish to
survive

prey

fish length

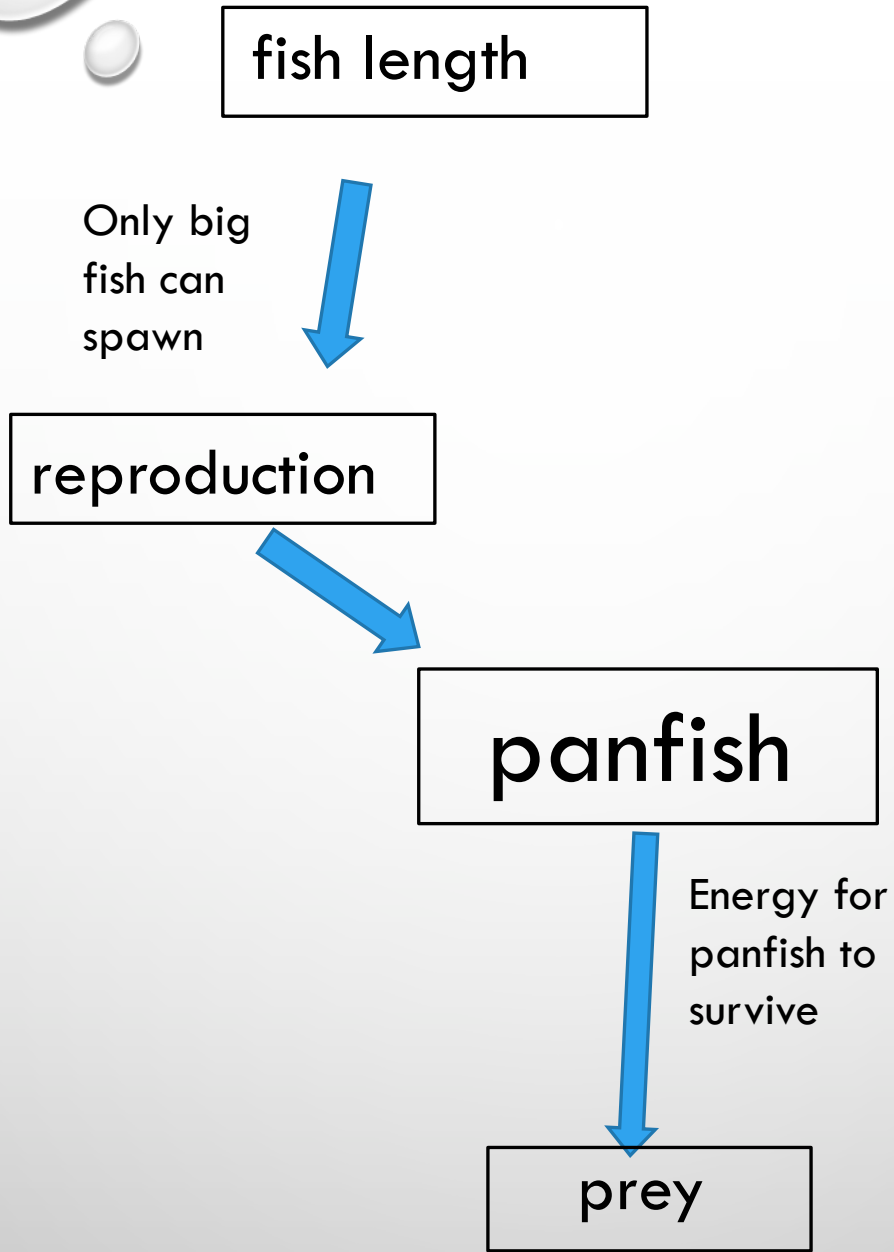
Only big
fish can
spawn

reproduction

panfish

Energy for
panfish to
survive

prey



fish length

Only big
fish can
spawn

habitat

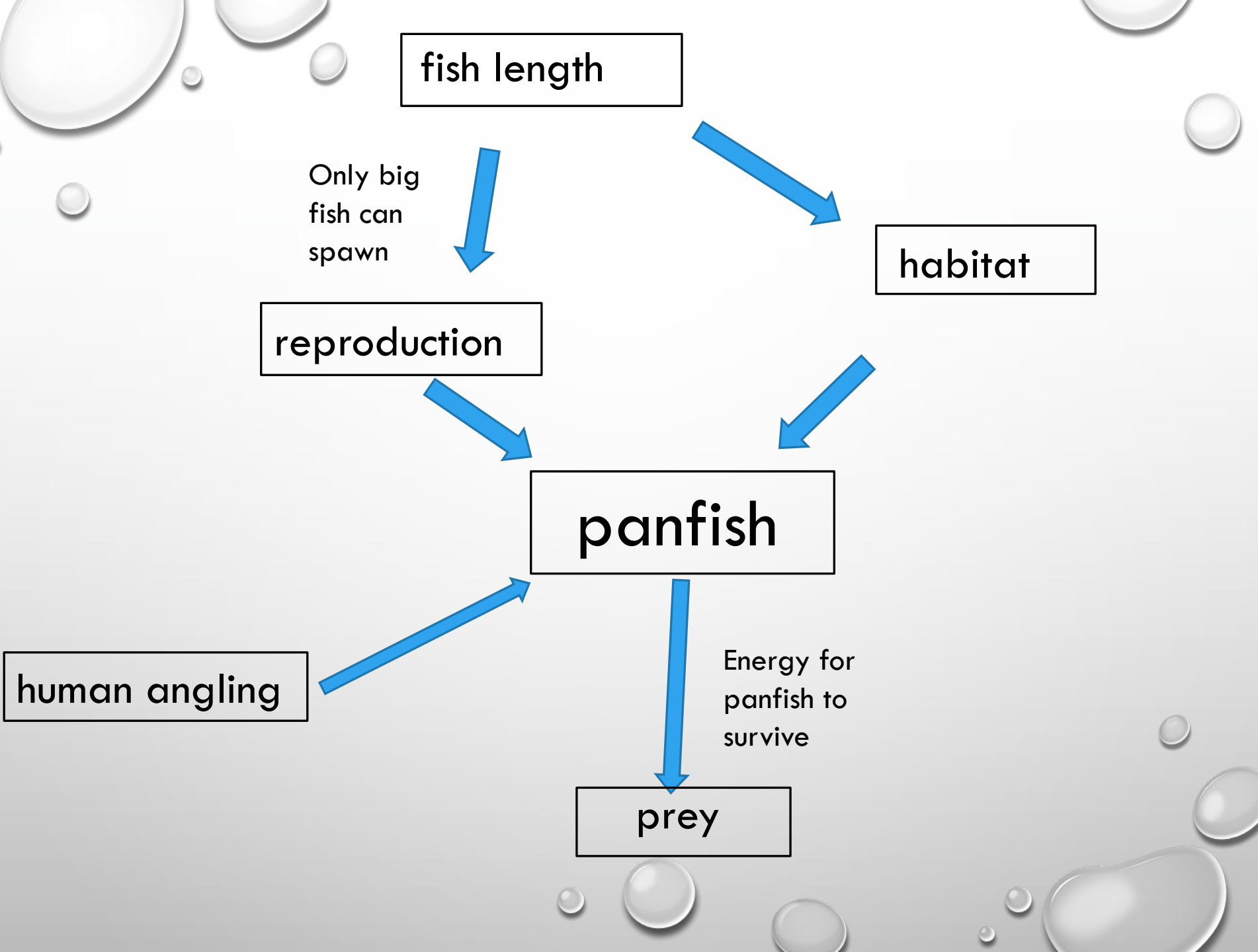
reproduction

panfish

human angling

Energy for
panfish to
survive

prey



ECOSYSTEM APPROACH

- FISHERIES MANAGERS HAVE TO CONSIDER **THE WHOLE ECOSYSTEM** WHEN THEY MAKE DECISIONS
- EVERYTHING HAS A CHAIN REACTION – RELATIONSHIPS ARE ALL CONNECTED

REGULATION TYPES

- BAG LIMITS – LIMITS THE NUMBER OF FISH YOU CAN TAKE HOME
- SIZE LIMITS – LIMITS THE SIZE OF FISH YOU CAN TAKE HOME
- OPEN SEASONS – LIMITS WHEN YOU CAN FISH FOR THAT SPECIES
- CATCH AND RELEASE – YOU CAN'T HARVEST THAT SPECIES

TAKE AWAY:

- REGULATIONS THAT YOU SEE ON LAKES ARE BASED ON LOTS OF MONITORING RESEARCH!
- THE SPECIFIC REGULATION TYPE IS USED TO MAKE SURE THE ECOSYSTEM IS BALANCED.
- KEEPING FISH POPULATIONS AT A STABLE LEVEL WILL HELP THE LAKE'S PREDATORS, PREY, FISHING, ZOOPLANKTON, ALGAE, AND NUTRIENTS.



PREVIEW FOR FIELD TRIP:

- SAMPLING FISH WITH A SEINE AND MINNOW TRAPS
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