



Brook Stickleback

Culaea inconstans

Ashley Poehls

Taxonomy

Class: Actinopterygii

Order: Gasterosteiformes (Sticklebacks and Seamoths)

Family: Gasterosteidae (Sticklebacks and Tubesnouts)

Genus: *Culaea*

Species: *inconstans*

Identification and Characteristics

- 4-6 short dorsal spines
- Body dark olive green with numerous pale spots on flank
- Pelvic fins each reduced to single spine
- Slender caudal peduncle
- 2.5 inches



Key Features

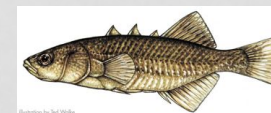
Brook Stickleback



Ninespine Stickleback



Threespine Stickleback



- 4-6 dorsal spines
- Without keel
- Rounded caudal fin
- Gill membranes free from isthmus

- 3 dorsal spines
- Vertical plates on sides
- Keel present
- Gill membranes attached to isthmus

- 8-11 dorsal spines
- Sharp, lateral keel
- More lunate caudal fin
- Gill membranes free from isthmus

Breeding Habits



- Males become blackish
- Build nest with twigs and leaf debris- kidney liquid
- Courtship dance
 - Chase, bite, pull female
 - Nudge female's caudal peduncle
- Female vibrates and releases eggs
- Male quickly swims over nest and releases sperm
- Guard nest
- fan with pectoral fins
- Males take young into mouth and spit back into nest

Mating Habits

- Spawn early May to middle of June in shallow, slow moving, well vegetated water
- Spawn once per year
- Incubation period of about 9 days
- Mature and spawning after one year

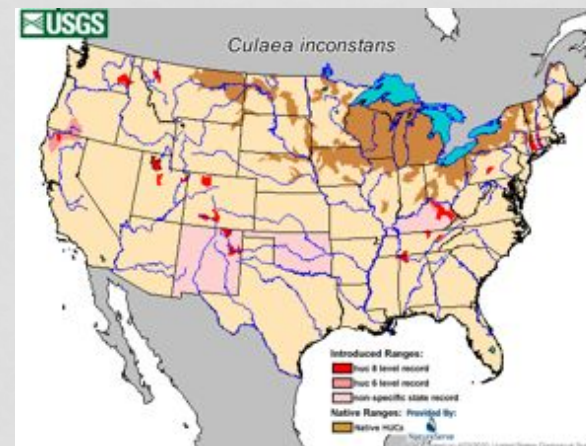


Habitat

- Rivers, streams, ditches
- Lakes, spring-fed ponds, seasonal ponds, bog ponds
- Cool, clear waters
- Sand, mud, pebble sediment
- Climate: Temperate; 4°C - 18°C



Home Range



- Also along McKenzie River in N.W. Canadian Territories
- Introduced in Germany and Finland accidentally with Black Bass

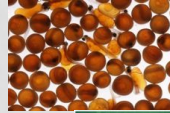
Diet and Impact on Humans

Diet:

- Aquatic insects
- Rotifers
- Fish eggs and Larvae
- Algae

Impact on Humans:

- Harmless
 - Eat eggs of other fish, very aggressive
- Used as bait
- Used in fish tanks



Interesting Facts

- Sexually dimorphic- males have larger pectoral fins than females
- Females vary in pectoral fin ray number- those with even number lay 15% more eggs



Works Cited

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Questions?

