

Spiny Waterflea Natural History

(information from Minnesota Sea Grant)

Good Swimmers

- The ability to swim, as opposed to merely drifting with the current, helps them to encounter prey and to move between shallow and deeper lake waters
- Research has shown that adult females move to deeper water during the day to avoid predation and then rise closer to the surface at night where there is abundant food and warmer water

Rapid Reproduction

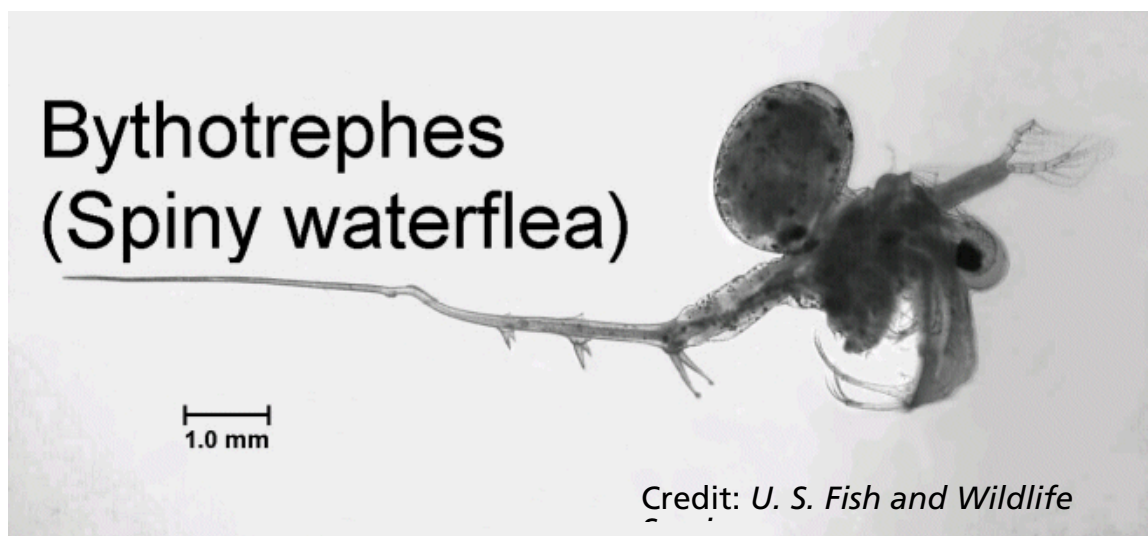
- Most of the time, females reproduce asexually- females produce from one to ten eggs that are able to develop into new females without mating or fertilization
- During the summer, when the surface water of the lake is warm and the spiny waterflea's metabolism is high, females can produce a new generation in less than two weeks
- Males are rarely found when food is plentiful, or when environmental conditions favor rapid population growth

Slow Reproduction

- When food becomes limited or when the lake cools in the fall, males begin to appear because females respond to the changing conditions by producing male instead of female offspring
- Males mate with females, producing resting eggs

Resting Eggs

- When females release the eggs later in the season, they fall to the lake bottom where they can survive the cold winter
- In spring or early summer, these eggs hatch into juvenile females that begin asexual reproduction again
- Eggs can remain dormant for long periods of time



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