

Abstract

I measured growth of lake sturgeon at maximum ration over 28 days at 7, 10.5, 15, 19 and 23 °C, and compared these results with published data for other fish species. Fish were fed to excess on dead chironomid larvae twice a day. Growth rates increased linearly with temperature from 0.71 % BW/d at 7 °C to 1.52 % BW/d at 23 °C based on wet weight, from 0.21 % BW/d at 7 °C to 1.02 % BW/d at 23 °C based on dry weight, and from 3.25 kJ/g•d at 7 °C to 16.37 kJ/g•d at 23 °C in terms of energy . Mortality also increased linearly with temperature from 18 % at 7 °C to 45 % at 23 °C. High mortality at 23 °C suggests that this temperature is close to the upper incipient tolerance level of these fish. Sturgeon growth rates were similar to those reported for salmonids. Slow growth exhibited by sturgeon in the wild is probably due to limited food availability.