

## PEAMOUTH CHUB (*Mylocheilus caurinus*)

### Ecology and Life History

Peamouth chub range throughout most of British Columbia, into Washington, Oregon, Montana and Idaho, and are primarily found west of the Rocky Mountains (Scott and Crossman, 1973). Peamouth chub are a schooling fish, inhabiting shallow water areas with vegetation. In general, young of the year fish typically reside in near shore areas (Coker et al, 2001), while large, mature individuals reside in deeper water (Scott and Crossman, 1973; Coker et al, 2001; Roberge et al., 2002).

Peamouth consume mainly insects, but may also forage on molluscs and other small items (Scott and Crossman, 1973). Larger pearmouth may also consume young fish such as young of the year (YOY) sculpins (Scott and Crossman, 1973). Foraging occurs mainly at night, closer to shore (McPhail and Lindsey, 1970).

Peamouth spawn in the springtime in streams or lakes, usually between May and June (Scott and Crossman, 1973; Coker et al., 2001) when water temperatures are between 10 to 15°C (Coker et al, 2001). Large spawning aggregations occur, and groups of fish may be as large as 400 individuals (Scott and Crossman, 1973; Coker et al, 2001). Females move into spawning areas and multiple males will court a single female. The green/grey, small adhesive eggs are deposited onto rock shallows (Scott and Crossman, 1973).

### Okanagan Lake System

Peamouth chub were sampled in both beach seines and gill nets. These fish consisted of 37.9, 18.7, and 29.4% of the community sampled in gill nets in the spring, summer, and fall, respectively. Adult chub were generally more abundant in deeper sites with fine substrates and aquatic vegetation. Juvenile chub were strongly associated with shallow, well-vegetated sites. A significant large proportion of juvenile chub were sampled around the Kelowna Yacht Club, Manhattan Point, and Sutherland Bay. It appears that juvenile chub may congregate around structure, whether it was artificial (e.g., docks) or natural (e.g., aquatic vegetation) based upon the number of individuals sampled using beach seines at the Kelowna Marina site (Site 8), Sutherland Bay (Site 10), and Manhattan Point (Site 11).

Spawning areas were identified during the survey, and it is probable that these fish will utilize many different shorelines for egg deposition. Ripe males were found at several sites, and all different shoreline types were represented, including marinas. The distribution of ripe males was relatively uniform across the Kelowna Waterfront and no clear trends could be determined. The entire spawning season likely occurs slightly earlier than pikeminnows, between May and mid July, with peak spawning activity in late May or early June. Due to the large number of sites where ripe adults were sampled, spawning habitat does not appear to be limiting factor for this species.

Several different parasites were found in some individuals. There appeared to be low prevalence (<5%) of a parasitic infection based upon cursory analysis. However, our analysis focussed primarily on large, obvious parasites such as cestodes (members of the tapeworm class) and a complete investigation of the parasite assemblage in Okanagan Lake is recommended.

In general, it is believed that these fish are not affected by in water structures or development to the same extent as more sensitive fish species (e.g., Kokanee). They tend to occupy most habitat types within the lake and there does not appear to be any habitat limiting factors. Based upon these observations, Peamouth chub are not considered to be species of significance.

### References

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