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Mary E. Power, Michael S. Parker, and William E. Dietrich. 2008. Seasonal reassembly of a river food web: floods, droughts, and impacts of fish. *Ecological Monographs* 78:263–282.

Appendix B. Enclosure specifications.

Enclosures were boat shaped, with pointed 'bows' oriented into the upstream flow (Fig. B1). Walls of plastic (Vexar) screen 1.3 m high were supported by rebar and PVC poles, and lined with 3-mm mesh plastic shade cloth. The shade cloth extended 60 cm below the bottom edge of the stiff Vexar wall. This shade cloth skirt was buried with cobbles and gravel (ca. 1 tonne per enclosure) to seal the enclosure to the river bed, and preclude passage by larger fish and river otters (*Lutra canadensis*). Upper edges of enclosure walls were bent outwards and secured with cable ties to increase sunlight reaching substrates inside. In addition, a 1-m high collar of 2.5 cm mesh nylon bird netting was fastened to the top rim of these walls and stretched outwards at a 45° angle around each enclosure to prevent otters from climbing in over the walls. Except for a narrow (30 cm wide) zone disturbed by burying the skirt, the bed of the river within and around each enclosure was unmodified. Flow velocities in pools were < 5 cm/s during experiments, so sediment deposition was similar inside and outside of enclosures (Power 1990) and little drift accumulated on enclosure walls. Walls were hand cleaned from the outside with bathroom brushes as necessary (about once a week) to keep the 3-mm mesh open. Most mobile invertebrates and young of the year fishes in the river could pass through this mesh size, but it blocked movements of roach and steelhead > 30 cm SL.







FIG. B1. Boat-shaped vexar enclosures and exclosures installed around large boulders and bedrock formations in the South Fork Eel River.

LITERATURE CITED

Power, M. E. 1990. Effects of fish in river food webs. Science 250:411-415.

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