

## THE FISHES OF BLUNDELL RESERVOIR MONTICELLO, TEXAS

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Blundell Reservoir located in Monticello, Texas, is an 809.4 hectare (2000 acres) reservoir that receives a heated effluent. Water temperature, dissolved oxygen concentration, pH, and total alkalinity were measured at six stations in the reservoir.

The reservoir was sampled periodically from July 1974, through August 1975 to determine the ichthyofauna of the reservoir and their distribution and relative abundance. Collections were made with experimental gill-nets and a 6.1 m (20 ft.) seine.

There were significant differences in relative abundance between stations for white crappie (Pomoxis annularis), gizzard shad (Dorosoma cepedianum), channel catfish (Ictalurus punctatus), bluegills (Lepomis macrochirus), and black crappie (Pomoxis nigromaculatus). There were no significant differences in relative abundance between stations for spotted suckers (Minytrema melanops), walleye (Stizostedion vitreum vitreum), black bullheads (Ictalurus melas), and flatheads (Pylodictus olivaris).

Calculated weights of condition for six species were compared between stations and two seasons, and no significant differences were found.

Parasitism by Argulus on black bullheads (Ictalurus melas) and leeches on channel catfish (Ictalurus punctatus) decreased from January through April.

The power plant began generating December 23, 1974. Since the reservoir was receiving a thermal discharge only during the latter half of the study, it was difficult to determine any effects.

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