

NRF-SAIAB Seminar Series 2025

Thursday 10 July 2025, 10.30am (SAST)

Venue:
Lecture Room

Zoom Registration link:
https://zoom.us/meeting/register/J848ycefRfi9bU1aCsV1_A
Passcode: 689339

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Role of morphology in structuring the feeding niches of dominant fish species inhabiting the Glen Alpine Dam, Limpopo River system, South Africa



This study tested whether trophic niche segregation facilitates coexistence in a diverse fish assemblage in Glen Alpine Dam by examining feeding morphology and diet composition. Results revealed morphological overlap of the cichlids (Mozambique tilapia and Redbreast tilapia) possessing traits linked to feeding on hard-to-digest items and small prey in turbid water. This was reflected in its diet which was dominated by plant material, detritus and ostracods. Mormyrids (Limpopo bulldog and Southern churchill), Threespot barb and Eastern butter catfish also grouped. Mormyrids showed high consumption of ostracods and chironomids, although the Limpopo bulldog also consumed high amount of insects as the Eastern butter catfish. The threespot barb exhibited a distinct dietary pattern. Largemouth bass formed a distinct group indicative of a predatory strategy targeting larger prey, hence the dominance of fish and dragonflies. These results support the hypothesis that morphological differentiation facilitates trophic niche segregation and coexistence.