



KORSMAN CONSERVANCY NEWSLETTER

AUTUMN 2022

Aquatic Biodiversity Project: Part 2, Flora

Following the highly successful fish release project, there was still a portion of the Rotary grant available. As aquatic plants are also excellent for water quality, we decided to add water lilies to the Pan. They feed voraciously on nutrients so they help to cleanse the water. However, they need a fairly constant water level so could not be planted in the Pan floor and we had to invent a way of planting them.

As it is now winter, the plants will only flourish in Spring when the water warms up.



Water lilies were sourced through Heckers Nursery, who assisted with a discount as they recognised our work caring for Korsman.

Lily pads create habitat for creatures such as this Masai Sprite damselfly



Our original water lily, which was donated in 2021, in a prototype floating frame



The final design of floating frames each support four basins with mesh baskets for protection.



News Flashes



More Mosaic

Volunteers decorated another fence post that was dug up in pathway construction last year. Not in photo: Allison Diesel



Can you spot the birdwatcher?

Goliath Breeding 2022

It is reported that Goliath herons can nest in trees and on rocks, but this has never been seen at Korsman where the herons have always used patches of sedge or bulrushes. Except for now, where the Kilfenora pair have started building a nest on the rock island.

Should they stay in this nest, there will be excellent views from the Shannon berm.

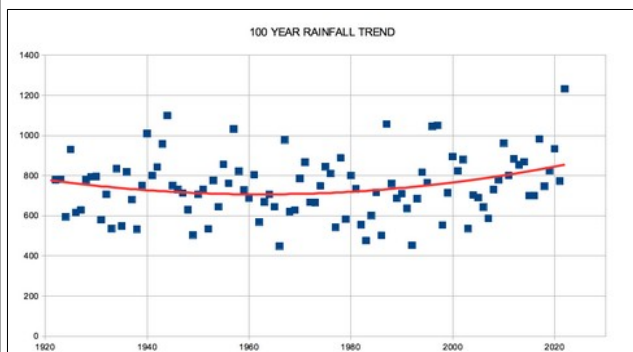
Look out for a second pair which may nest opposite 34.



Record rainfall

As part of our Pan water levels project, John Livesey and I examined nearby rainfall records going back to 1921. (From 1921 to 1963, rainfall was recorded at the horse racing track which existed around Dunswart Pan in The Stewards).

Rainfall this hydrological year (since 1 October 2021) is already 1232mm, a record. Averages show an increasing trend over the last 20 years.



BOOK REVIEW by Jane Trembath

A review will also be published in the next issue of African Wildlife and Environment magazine

Fry, Christian (2021) **Field Guide to the Freshwater Macroinvertebrates of Southern Africa**

Jacana Media

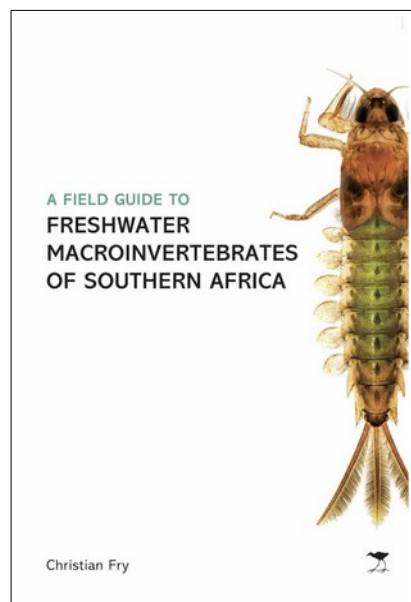
Soft cover, 24 x 17 cm, 256 pp, illustrated in colour throughout with photographs, drawings and maps.

ISBN 978-1-4314-3105-2

RRP R295.

The book is available for purchase from

<https://jacana.co.za/product/freshwater-macroinvertebrates/>



This is the first field guide focusing strictly on freshwater macroinvertebrates (animals lacking a backbone and large enough to see without the aid of a microscope). Aquatic invertebrates might be small, but they are a crucial part of the wetland food chain. They eat bacteria, algae and detritus, and are in turn eaten by fish which are eaten by birds. The author, Christian Fry, is a passionate freshwater ecologist with experience across Africa. Christian's knowledge of freshwater systems, combined with his excellent photographs, brings the unseen organisms in wetlands to life.

When we held the very successful Freshwater Life event in 2018, the discoveries were exciting for all of us regardless of age. That is why this book will be so valuable; it fills a gap and opens up a new world of biodiversity in water.

This book does not aim to identify organisms to species level. Although it is intended for field use, there is essential information on the ecology of each order, to read at home. Did you know why we often see crabs on The Drive? They are migrating to colonise new water bodies.

The macroinvertebrates covered in the book range from crabs and snails, through insects, down to almost-microscopic water fleas and copepods. It describes how and where to find them – by turning over rocks or sweeping aquatic vegetation, whether the insect prefers standing or running waters, and how sensitive it is to water quality.

This guide goes into detail of the larval stage of insect orders such as dragonflies (Odonata) and true flies (Diptera). Another 'Did You Know' - most aquatic insects spend the majority of their life cycle as larvae and only transform into adults for a short final mating stage of life. The larval stage of dragonflies can last for months, and in mayflies, the adult stage is as short as one hour. It's an achievement that the author has managed to find and identify so many larvae to include in the book.

The photographs are clear and some pictures have descriptive labels of the organism's parts. This helps in understanding the scientific terms used, because even as an enthusiastic citizen scientist I found the academic level of the terminology a challenge. Considering that the book's target market includes amateurs and children, readers who are not scientifically trained may have to look up several definitions not included in the short glossary.

We plan to hold another Freshwater Life event soon, netting critters from the water and identifying them using the book.

Time to 'Hide' Again

As pumping continues, the water level has dropped and the hide is now reachable wearing gumboots.

Photographer David Dooley visited the hide and said that although the water is still a bit high for many birds to be seen, "it was just so awesome to sit quietly and enjoy the peace and tranquility again".

The path should be dry enough for normal shoes in a few weeks.



Purple Heron and
landing African Darter
By David Dooley



Departing African Darter
By Eugene Liebenberg

