

Rivers, the veins of our Country

Six case studies of First Nations involvement in managing water for the environment in the Murray-Darling Basin 2021-22

Immersive outdoor classroom at Calperum Station

Riverland Indigenous Rangers teach students about First Nations and Western science ecology

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Calperum Station is a 242,800-hectare Mallee floodplain north of Renmark in South Australia. The station hosts significant First Nations cultural heritage sites and is also home to threatened species such as the Southern Bell frog and Malleefowl. To protect the internationally important floodplain, part of the Riverland Ramsar Site, the Commonwealth Environmental Water Holder (CEWH) in partnership with the Australian Landscape Trust delivers water for the environment to continue to improve the health of the floodplain and the valuable habitat it provides for migratory birds and rare and threatened species.

Key to the success of the partnership are the Riverland Indigenous Rangers, who are funded by the National Indigenous Australians Agency (NIAA) to support local First Nations community's desires for greater involvement in natural and cultural resource management.

The Rangers have a unique understanding of the landscape and connection to Country, which has been invaluable for the successful delivery and management of water at Calperum Station.

The Rangers manage the pumps, collect delivery data, assist with environmental

monitoring of watered sites and have also designed a Calperum Lakes and Wetland tour to engage the public in the important work being done to deliver a healthy river system for all.

In partnership with Calperum Station and the Riverland Indigenous Rangers, the CEWH's Lower Murray science team of freshwater ecologists have delivered several Indigenous Ecology in Action workshops for local Riverland high school students. The workshops combine First Nations and Western science and knowledge where students learn about the cultural value of Country, the River Murray, and monitoring and research techniques.



*Students undertaking vegetation surveys.
Photo credit: SARDI*



*Students wearing waders and heading into the creek to set fyke nets.
Photo credit: SARDI*



In the workshops so far, Ral Ral Creek and floodplain at Calperum Station provided an outdoor classroom where students could connect to Country while learning. On arrival the students were excited to be out on Country and ready to learn! The students were taught ecological survey techniques including animal scat and vegetation surveys and learnt about propagation and revegetation using native floodplain plants.

A favourite activity for the students was putting on waders and heading into the creek to set fyke nets to catch and identify fish and learn about monitoring.

In addition to learning about ecology, students were taken on a cultural walk where Riverland Indigenous Rangers Jeremy and Andrew Summer showed the students how their ancestors carved canoes from river redgum and used ring trees as the front doors of their homes. The students were able to see an oven tree and learnt how a clay oven under a large gum tree was used to dry reeds that were harvested from the river for weaving.

During the walk, station ecologist Caitlin showed the students sites where the water for the environment was delivered. To wrap up the workshop, local Elder Uncle Barney taught the students about the theory of boomerang making and with the help of Jeremy and Andrew taught the students how to shape and paint their own boomerangs to take home.

The Indigenous Ecology in Action workshop provides a culturally safe and engaging space for First Nations students to learn more about Country and culture, and how combining First Nations and Western science and knowledge can help to restore some environmental conditions and values to heal Country.



*Catching and identifying fish and learning about monitoring.
Photo credit: SARDI*



Students learning about propagation and revegetation.
Photo credit: SARDI



Students learn how to shape and paint their own boomerangs – two photos.
Photo credit: SARDI

