

Learning about nature

You are never too young to start learning about nature and our precious biodiversity. Koeberg's Conservation staff and Visitors Centre staff often work together to give visiting school groups a holistic experience. Learners have the opportunity to learn about the different power generation technologies Eskom uses, with focus on nuclear power. They also get the chance to experience nature first hand.



A number of outdoor activities are available to school groups, such as short walks during which learners must try to collect as many items from a list as possible, such as a feather, a pebble, a piece of plastic, a flower etc. This is done to ensure that they are engaged throughout the activity. At the end of the walk they share their found objects and observations. Depending on what was collected, the objects are used to educate them and to instill respect for nature.



Defending biodiversity

One of the biggest threats to biodiversity is invasive alien vegetation. They are non-indigenous plants introduced by humans, often intentionally and for a specific purpose (e.g. to stabilise dunes). Some species become invasive in their new environments because they have no natural enemies. Billions of rands are lost every year due to productivity loss and control programmes. Koeberg Nature Reserve is also threatened by invasive alien plants.

Some of the impacts are:

- Competition – indigenous plant species are out-competed
- Reducing habitat diversity which has a direct impact on the fauna
- Habitat fragmentation - restrict natural movement of indigenous populations and species
- High consumption of water: an average Rooikrans tree consumes up to 200 litres of water per day
- Biodiversity loss through loss of habitat, flora and fauna
- Loss of 'sense of place' - loss of the scenic beauty of the area as the natural vegetation is replaced by dense stands of monotonous and unattractive Rooikrans or Port Jackson trees.
- Fuel for fires - dense, dry material increases the heat of wild fires

A 2016 study on the impact of invasives on the Western Cape water supply system, showed that they reduce water yield by 38 million cubic metres per year, this equates to losing the entire Wemmershoek Dam annually!

At Koeberg Nature Reserve a huge amount of work is done to monitor, control and eradicate these invasive species. Clearing methods include manual clearing and the application of herbicides. The battle against alien invasive species cannot be won overnight. It requires a massive effort and commitment over many years. It is one of the ways to protect biodiversity and improve the ecosystem functioning.

Cape Weaver, one of over 200 species of birds found in Koeberg Nature Reserve



Get to know your snakes

Cape Cobra (*Naja nivea*)

The Cape Cobra also known as a 'Geelslang' or 'Koperkapel' is found mostly on the ground, but they can climb into trees and shrubs in search of food. When they feel threatened they usually lift their heads off the ground and spread their necks into a broader hood.

The Cape Cobra's fangs are fixed in their mouths - causing them to bite rather than spit. They are one of four non-spitting cobras found in southern Africa. An adult can grow up to 1.6m in length. They vary in colour from light yellow to rich yellow, copper or light to medium or dark brown and even black, often speckled with shades of brown and orange. Young snakes have one or two dark throat bands.

In self-defense or as a warning signal, cobras will lift their heads off the ground, facing their enemy while spreading their ribs in a broad hood, striking readily. They may hiss as well. These are warning signs to leave them alone. Like most snakes, Cape Cobras will rather flee from humans than attack or bite.

Their venom contains very powerful and fast acting neurotoxins (nerve-destroying) leading to respiratory failure. Bite victims may need artificial respiration until the anti-venom can be injected. Any bite from a Cape cobra is life-threatening and needs urgent medical care.

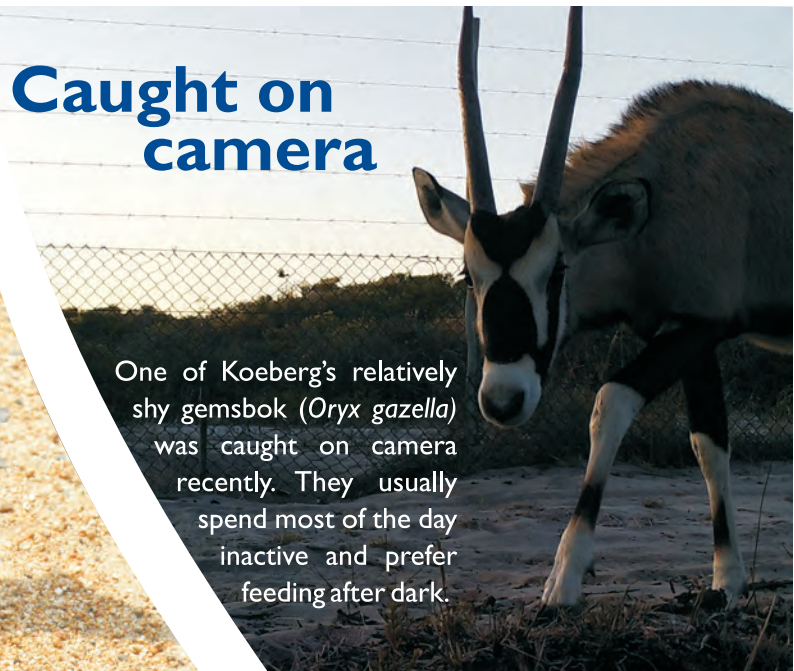


Not your average girl next door

Amanda Mtshixa considers herself as the *girl next door*. From her humble beginnings in the informal settlement of Driftsand, she is now completing the final year of her National Diploma in Nature Conservation. Every year Koeberg Nature Reserve provides an opportunity for students like Amanda to complete their required Year of Work Integrated Learning, a prerequisite for them to receive their diploma. Amanda says she is goal driven and a firm believer in education. She considers herself very fortunate to be able to do her year of work at Koeberg: "I am learning a lot, such as practical skills needed in the field and I have grown immensely when it comes to team work. I come from a one-dimensional background and this opportunity has exposed me to a diverse range of individuals and activities. My goal is to move from strength to strength, a girl next door making a difference towards a better earth for our children's children."

Caught on camera

One of Koeberg's relatively shy gemsbok (*Oryx gazella*) was caught on camera recently. They usually spend most of the day inactive and prefer feeding after dark.



- DO NOT recklessly dispose of cigarette butts.
- DO NOT make open fires close to natural vegetation.
- DO NOT use fire for land clearing.
- DO NOT deliberately set fire.
- NEVER allow children to play with matches/lighters etc.
- EDUCATE children about the risks of fires.
- DO NOT improperly dispose of ash.
- DO NOT litter.

Help prevent wild fires

Cape Peninsula Fire Protection Association

24 Hour Emergency Number

021 480 7700 107