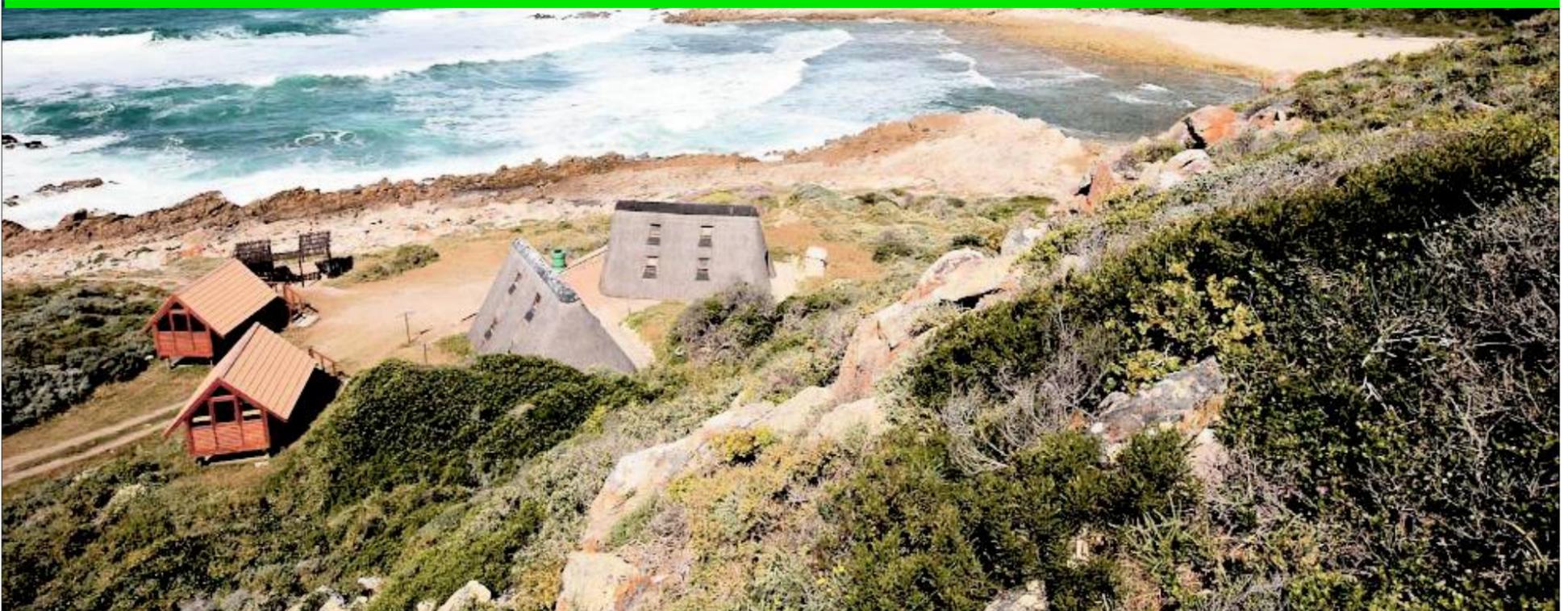


shoreline



ON THE ROCKS: The accommodation and restaurant offer excellent service and historical architecture.

LOCATED to the east of the southernmost tip of Africa, the diverse De Hoop Nature Reserve is extremely photogenic, with blinding-white sand dunes, emerald sea water, wild beaches and thousands of fynbos species.

The De Hoop Vlei – 18km long – was South Africa's first Ramsar-accredited birding site and the Potberg Mountains shelter one of the country's last breeding colonies of Cape griffon vultures.

The accommodation and restaurant are also among the best, a combination of excellent service and historical architecture.

But De Hoop should be recognised as one of the country's most important reserves because of its Marine Protected Area (MPA), extending 46km along the coast and three nautical miles out to sea.

During spring several hundred southern right whales arrive from Antarctica to calve and mate in the bay, making it perhaps the world's most important nursery for this species. The popular four-day Whale Trail offers hikers plenty of opportunities to see these leviathans.

But the MPA is also the site of the longest-running fish study in the world, the evidence of which has had global implications for marine conservation – and food security.

The researcher at the centre of this study is Colin Attwood, an associate professor of zoology at the University of Cape Town. Every year in October – since 1985, when the study began – Attwood and a team of anglers use standardised techniques to catch fish in

CATCH AND RELEASE

YEAR IN THE WILD



SCOTT RAMSAY

designated areas.

All fish are recorded, identified, measured and then released. Some of them are tagged, so if these fish are caught again their movements can be monitored. About 50 000 fish to date have been caught and released along De Hoop's coast. Of these about 30 000 have been tagged.

About 300 species of fish can be found in De Hoop's marine area, but Attwood and his monitoring team typically catch and release about 40 of these, including dusky kob, galjoen, white musselcracker, black musselcracker, red roman, elf and red and white steenbras.

"De Hoop was a watershed for marine protected areas," Attwood explained. "It was regarded as one of the country's prime angling areas up until its formal protection

in 1985. Then fishermen were excluded and it presented an excellent opportunity to monitor what would happen to species like galjoen if they were protected."

"The main result of the study is that the fish showed a massive recover – that's not surprising today. We know now that if we create a protected area, fish stocks will recover."

"But in 1985 that was big news because no one really believed that MPAs would make any difference. Most people thought that line anglers had no impact on fish stocks. Instead, everyone blamed trawlers. Fishermen and scientists thought that fish moved around so much that it wouldn't help closing a particular area."

But many fish spend their whole lives within a certain area.

"The big insight came with the tagging, which proved that many fish species are resident and very reluctant to move. No one at the time would have believed that a galjoen spends most of its life in an area of 300m to 400m."

But how do marine protected areas benefit fishermen – and

“The main result of the study is that fish showed a massive recovery – that's not surprising today

society – in areas that aren't protected? If species like galjoen, red roman and musselcracker don't move much, then is the rest of the coastline doomed to being overfished and devoid of life? This is where the implications of MPAs are important not only for marine conservation but also the nation's food security.

"Most of the benefit is the result of the spread of eggs and larvae," Attwood said.

"A fish can lay 200 000 to 500 000 eggs in a season, and these hatch into larvae. Both the eggs and larvae are at the mercy of currents, which distribute them all over the ocean."

"In other words, De Hoop is home to a centralised breeding stock which can repopulate a much larger area. The analogy is a bit like having money in the bank. If you have a certain amount of capital, then you can live off the interest. Explained this way, fishermen then start to realise you can't take everything out of the sea all at once. You have to leave a core number of fish to breed."

The results of the De Hoop study were published internationally and since then other studies around the world have also proven that if parts of the ocean are protected, then fish stocks will recover – and repopulate other overfished areas.

Other studies have revealed that 30 percent of South Africa's people who live near the coast rely on subsistence fishing for food. Marine reserves can help ensure the food security of these people, yet just 6 percent of South Africa's coast is formally protected. The evidence at De Hoop suggests convincingly that much more of our shoreline should be protected.

For De Hoop's accommodation, see www.dehoopcollection.co.za. For the Whale Trail, see www.cape-nature.co.za. See also www.yearinthewild.com. Partners include Cape Union Mart, K-Way, Ford Everest and Goodyear.



SUNSET: The evidence at De Hoop suggests that more of our shoreline should be protected.



CARING: The site has the longest-running fish study in the world and has global implications for marine conservation.



HELPFUL: Wooden steps provide easy access to the shore at De Hoop Nature Reserve.