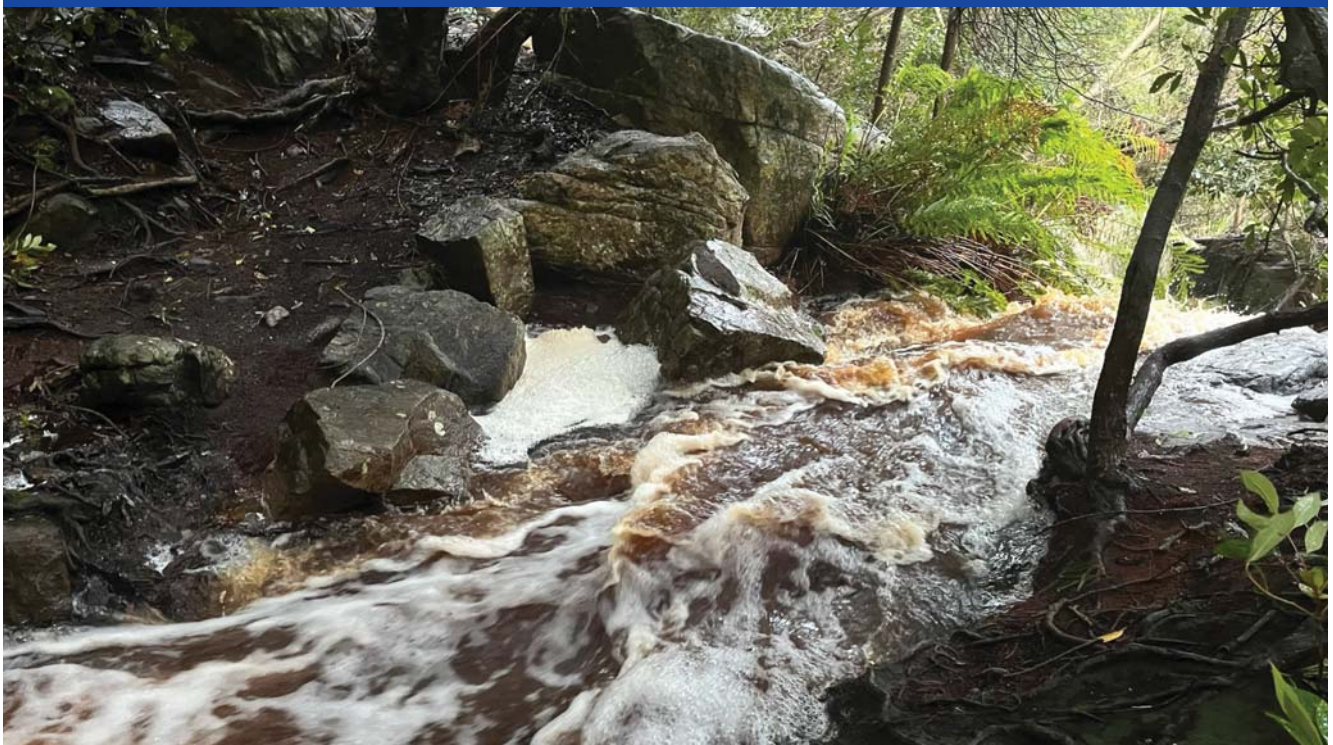


RIVER ECOSYSTEMS

Silvermine – A journey along one of South Africa’s aquatic jewels

Petro Kotzé journeys along the Silvermine River, one of only a handful of rivers in South Africa that runs its course without going through a developed area.

Roule le Roux



Cape Town’s Silvermine River, which today falls in the Table Mountain National Park (TMNP) winds from its source in Steenberg Mountain to Clovelly Beach, next to Fish Hoek Beach in the city’s southern suburbs. Following its course is to hike through the history of a popular section of Cape Town and a journey through South Africa’s differing approaches to water management.

The source and the beginning

Water flows to the 12.3 km Silvermine River from a catchment area of over 2 000 ha. Starting at an altitude of 640 m, the river flows southeasterly across the Steenberg Plateau, formed during faulting and uplift in the early Tertiary, some 30 million years ago. An information board at the river mouth tells the tale of the early

inhabitants of this area. A combination of rock shelters, high-protein marine foods, abundant seasonal game, and *veldkos* (wild plants) attracted people to the mountains, valleys, and shore of False Bay. It’s easy to imagine that the river was also part of the appeal.

At the local museum, Margaret Gundry, a Fish Hoek Valley Museum volunteer is just putting the final touches on her upcoming talk about the Peers family, who excavated the famous Peers Cave (or *Skildergat*) in the 1920s. Located in the Fishhoek Valley, the cave contained remnants of the people who once lived here during the Later Stone Age, close to the river. The remains of nine people were found, including two nearly complete female skeletons, four children and the famous ‘Fish

Hoek Man' as well as ostrich-eggshell beads, bone awls, arrow points, bored stones, and even a small leather bag filled with herbs.

For clues about the animals that roamed here before the arrival of European settlers, researchers Boshoff and Kerley used historical accounts and habitat requirements. They mapped the likely distribution of larger mammals in the Cape Floristic region for the period. These indicate that caracal, brown hyena, African wild cat, Cape Fox, black-backed jackal, red hartebeest, steenbok and eland could have been seasonal visitors around the Silvermine area (or occurred in small groups distributed in patches). Leopard, chacma baboons, porcupines, Cape Mountain Zebra, klipspringer, grysbok and grey rhebok could have occurred in significant numbers year-round.

Today, of these, only the caracal, the chacma baboon, the porcupine and the cape fox are still listed as present in the larger area. (Larger antelope species such as Eland, Red Hartebeest and Bontebok can be found in the TMNP Cape of Good Hope section).

The river's upper reaches saw the first substantial human manipulation when an 82 000 000 L dam was constructed across

a shallow valley on the Steenbeg Plateau in 1898. The historical event, as it was later described, would have had a pronounced effect on the lower part of the Silvermine River, retaining most of the upper catchment runoff. The dam's unfiltered, brown water was the main supply of Muizenberg and Kalkbay. The dam was decommissioned for potable water around 1920 when the coastal areas were linked to the supply from Steenbras Dam. After that, the Silvermine Reservoir overflow, known as 'brown water', was used to irrigate the Westlake golf course, an agreement that lasted almost five decades.

When author Jose Burman walked the river for a series written for *The Cape Argus* in the sixties, he describes a "pretty, tree-lined reservoir across the valley" into which small rivulets run down from the mountains. He lamented that people weren't allowed access without permission when it would be an excellent amenity for swimming, boating and probably fishing.

Much has changed for the benefit of the river since then. The greater Silvermine area was declared a Nature Reserve in 1965. Table Mountain National Park was established in 1998 and inscribed in 2004 as part of the UNESCO serial Cape Floral Region Protected Area World Heritage Site. It includes the Steenberg plateau and the now, much loved Silvermine Dam.



Petro Kotzé

The Silvermine River estuary has been rehabilitated and made an asset to the area.

Water provision to the golf course ceased, and the stream gushes downstream, especially after a wet, winter rainy season in Cape Town, tumbling over impressive waterfalls at places. The well-wooded ravine is now known as the river walk.

Some of Burman's wishes have come true. SANParks Regional Communications Manager, Lauren Clayton, says between 30 000 and 80 000 people pass the pay point closest to the reservoir every year. There is plenty to do, including swimming in the lake, picnicking, birding and hiking.

From the Steenberg Plateau to the Silvermine Valley

Burman described the river as "wild" and flowing through some of the peninsula's most remote portions. Today, Ou Kaapse Weg, a road opened in 1968 that runs over the Silvermine mountains across the river, will bring you comfortably close, even to the upper reaches. From the Steenberg Plateau, the river now flows under the road and cuts southwards through a deeply incised valley, picking up several small seasonal streams that drain the surrounding mountains.

Burman further described the kloof as continuing southward, dropping sharply towards the Silvermine Valley. "It is a wild, rugged ravine", he said, "and for long stretches, there are not the remotest signs of civilisation — the land looks like it must have done before 1652." The ravine is still rugged enough that one does not attempt to venture down it, and most demarcated hiking trails stay well away. Ou Kaapse Weg has, however, changed the land significantly, and the constant hum of traffic between Noordhoek and Steenberg permeates the air and mingles with the calls of frogs and birds after the light burst of rain earlier the day.

Burman described the river plunging in a series of drops over a seventy-foot fall to create another favourite picnic site. On the back of one of the wettest months in Cape Town in over six decades, the tea-coloured falls were roaring, and the wind whipped spray into us on the day. It's easily accessible, too, and the area is popular with hikers and trail runners. Not far from the falls, there are still ruins of the old *kruithuis* (powder house). The Dutch military allegedly stored gunpowder here for a possible British invasion, which took place in June 1795 at the Battle of Muizenberg.

Reports say that the Silvermine Valley has always been a strategic access point to the South Peninsula. The heights above are good lookout points, and the valley was historically used for grazing cattle. Defensive positions were built in 1805, and the first farms in the valley were granted three years later, enjoying a reasonable water supply.

Silvermine Farm lay along the upper banks of the Lower Silvermine River. The farm had grazing for two hundred cows and was cultivated for vegetables. The farmers, the Smiths, used to deliver milk to Simons Town and Crons Dairy in Fish Hoek with a two-horse wagon. Gundry remembers their vegetable shop in Fish Hoek Main Road.

At the time of Burman's visit, massive oaks lined the river's west bank perhaps dating back to the time of Simon van der Stel. It is also here where the mystery of the river's name is solved.

Old silver mine shafts excavated in 1687 – were apparently the inspiration for the name of the river and the mountain range. The story goes that until 1741 the river was known as Esselstein (Ysselstein Bay was the original name of Simon's Bay). By 1813, it had been renamed the Zilvermyn River, and the mountains behind it were the Zilvermyn Mountains (although museum volunteers placed a question mark over the truthfulness of the tale).

"Historically, the Silvermine Estuary comprised a series of shallow seasonal pans and vleis that periodically formed behind a low barrier dune just above the high water mark."



Roule le Roux

The brown water of the Silvermine plunges over the falls on its way towards the Silvermine Valley.



Remnants of the old farm buildings tell stories of the development of the past.

The mine tunnels are still indicated on old maps and accessible to those who know where to find them, but we were warned that, after all the rain, this would be a dirty affair. On his way there, Burman plodded along the farm track between rows of vegetables. Today, the way is overgrown and runs somewhere past the fence of South African National Parks' (SANParks's) Sunbird Education Centre – the old farmhouse. According to SANParks, the centre is based on Barend Nicolas Petrus van der Poll's renovated homestead, built in 1904, on the farm **Klein Silvermyn**. The original farm was named after the local silver prospecting sites despite no silver ever being found.

A large part of the upper farm was expropriated to construct the new Ou Kaapse Weg. The remaining farm was later sold to a group that returned the property to its natural state and ran it as the Sunbird Nature Reserve. The valley was transferred to the Table Mountain Nature Reserve in 1998. The development was to be fateful for the river. There were plans to build a dam here once, but they never materialised. Now, the area is being conserved, letting the river run undisturbed further downstream – at least for now.

The river passes the Clovelly Country Club a short distance further and then into an estuary and the sea. It is written that historically, the Silvermine Estuary comprised a series of shallow seasonal pans and vleis that periodically formed behind a low barrier dune just above the high water mark. The estuary would have covered an area between 50 and 60 ha, under which conditions it would have been a haven for fish and birds.

The mouth used to be a windswept stretch of desolate sand across which the river moved. There are plenty of stories about the danger of the mouth. The most famous is that an English officer lost his horse and barely escaped with his own life, nearly sinking into the quicksands. This wild, roving river mouth was restricted when the road and railway bridges were built at Clovelly in 1876 and 1890, respectively. Together with the impact of the dam upstream, these severely reduced the size of the estuary.

The upstream course of the river has also been constricted to accommodate a series of bridges. The railways built an embankment on the southern bank in 1900 to prevent flooding



The Silvermine Dam, constructed in the 1890s, is now a popular destination for a dip or a hike in the surrounding protected area.

into the village, but the system was being destabilised. Sand from the coastal dunes blocked the railway line, so they planted marram grass first and later levelled and stabilised the dunes with stone chippings.

However, the river kept interfering with expanding development. Over time, irregular floods plagued developments on the river's old floodplains and plans were made to canalise it. Local conservationists stepped in to rehabilitate the broken estuary instead. Starting in 2000, over two years, engineering works included redefining the floodplain with gabion structures and earth berms, creating stilling basins to attenuate floodwaters, filling some adjacent properties to prevent their flooding, extensive planting of indigenous wetland vegetation and building walkways. Now, the wetland is a popular 5.5-hectare recreational area.

The river still tries to return to its natural flow dynamics at the mouth and, when open for extended periods, tends to migrate across the beach towards the embankment that protects the railway, which has prompted officials to bulldoze the outflow channel straight again.

Still, many describe the Silvermine as a wild river and one of the most pristine on the peninsula. And, while people have left their mark over generations, future ones might ensure it remains that way.

References

- A. Boshoff, & G. Kerley (2001), Potential distributions of the medium- to large-sized mammals in the Cape Floristic Region, based on historical accounts and habitat requirements, *African Zoology*, **36**. 245-273. <https://journals.co.za/doi/10.10520/EJC17788>.
- M. Walker (2017). *The families and farms of the South Peninsula and Cape Point – the history of a bygone era* (Kalk Bay: Kalk Bay Historical Association).
- A. E. F. Heydorn & J. R. Grindley (1982), Estuaries of the Cape Part II, CSIR Research Report 412 (1982)
- J. Burman (1962), *Safe to the sea* (Cape Town: Human & Rousseau).
- C. Brown & R. Magoba, *Rivers and wetlands of Cape Town – Caring for our rich aquatic heritage* (Pretoria: Water Research Commission, WRC report no. TT 387/08).
- M. Cobern (1984), *Story of the Fish Hoek Valley* (Fish Hoek: MM Cobern).
- Table Mountain National Park (2015), Park Management Plan.