

MACAQUES





ILVER SPRINGS
State Park is a
1,895ha Florida
gem, where springfed waters meander
amid thick forests.
It's a lush natural
oasis that a host of

wildlife calls home, from iconic species such as the Florida manatee and American alligator, to a plethora of birds, turtles and fish. But there's also another creature living wild here that you wouldn't expect to encounter in any forest in the USA, a species usually associated with the temples of Nepal or the forests of South East Asia. It's the rhesus macaque, which has thrived in Silver Springs for an astonishing 80 years. Depending on who you ask, these monkeys are either a wondrous addition to the park or an invasive primate species that simply shouldn't be there.

Many of the details surrounding why and how rhesus macaques came to be living in this corner of Florida are shrouded in mystery, to the point where they have almost

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become the stuff of folklore. One story goes that Ross Allen Island, where the animals first made landfall, was used as the set for a *Tarzan* film, with the monkeys introduced to enrich the background scenery. Another is that the animals were released on the island after being used for scientific testing.

In fact, responsibility for the macaques' arrival is generally assumed to lie in the hands of an ambitious entrepreneur and riverboat captain named Colonel Tooey, who introduced a small troop on to Ross Allen Island in the early 1930s. Tooey wanted the monkeys as an additional attraction for his popular riverboat cruises, but had failed to

realise that not only are rhesus macaques one of the most adaptable primates on the planet, surviving in a variety of habitats across a vast amount of territory, from Afghanistan to China, but they are also good swimmers. When the newcomers promptly took to the water and escaped, Tooey – as the story goes – simply acquired and released several more. The monkeys rapidly expanded into other areas of the park, carving out a rather nice life for themselves.

Just as people came to see these energetic primates on riverboats back in the 1930s, so tourists paddle in canoes and kayaks to seek them out today, travelling from far and wide to enjoy both the scenery of Silver Springs and the peculiar sight of troops of macaques scampering through the treetops and making the occasional divebomb into the water. "They can swim quite well," says Steven Johnson, professor of wildlife ecology at the University of Florida, who has been studying the monkeys for several years. "Though you'll notice they don't like being in the water – they'll get out in a hurry when crossing the river."

URTURED BY FLORIDA'S subtropical climate, Silver Springs provides a perfect home for the macaques. Clean, fresh water is plentiful thanks to the spring-fed rivers, and the forests are rich in food for these opportunistic omnivores, offering everything from plants to insects to small vertebrates. Mothers can comfortably rear their young

Other species to see in Silver Springs

Gentle giants that swim from the coast into Florida's rivers in winter, for sanctuary in the warmer waters



Florida cooter turtle

Found in freshwater habitats from lakes to marshes, cooters often bask communally on logs or rocks



White ibis

Flocks of this elegant wader gather along the waterways. Their curved beaks are used to probe for food.



with little human disturbance and, as social, troop-living creatures, they have plenty of support from their fellow females.

"There is definitely more interest in the area because of them being out there," says local tour guide Joshua Swander. "If there are no monkeys, all you have is what is native to Florida. You have the different bird species, fish, turtles, manatees, alligators and river otters. You can go to any other spring and see those things.'

With monkeys swinging from the trees, this corner of Florida provides a microremnant of what North America might have looked like more than 20 million years ago. when prehistoric primates were present on the continent. The subtropical climate allowed native primates to flourish as far as Alaska, until plummeting temperatures, brought about by climate change, led to their demise.

T'S STILL NOT KNOWN EXACTLY HOW many macaques inhabit the park. The last estimate from Johnson and colleagues, from a count eight years ago, put the population at 176 individuals across five troops. "Based on growth models, we would predict that by now, unless there has been management I'm not aware of, it's probably closer to 400," he says.

The monkeys' potential to be troublesome is well understood. In the 1970s, another population of rhesus macaques was introduced to Florida, to two uninhabited islands in the Florida Kevs - Key Lois and Raccoon Key. The idea was that they would breed and create a supply population for medical research. The result was catastrophic, with the primates feasting on and all but destroying the local red mangrove trees, dramatically increasing the islands' risk of shoreline erosion. The monkeys were officially removed from the islands in 2000.

The macaques of Silver Springs have yet to commit such an ecological faux pas, vet there is one particular item on their menu that is worrying Johnson: their propensity to feast on birds' eggs. Between April and July 2014, he and his colleagues conducted a study, selecting four locations where the macaques had been spotted at least twice. In each, they placed an artificial wicker nest that mimicked the typical abodes of several common shrub-

nesting birds. The nests were baited with two quail eggs, with a clay egg alongside them to capture teeth marks. "Based on our findings, the rhesus macaques are eating native birds' eggs," he says.

You only have to look at what happened on Desecheo Island off the west coast of Puerto Rico to understand the potential consequences of an acquired taste for eggs.



"Macaques can swim quite well, though they'll get out in a hurry"

A group of 57 macaques was introduced to Desecheo in 1966 as part of a study into the processes of adaptation. While introduced rodents and goats had already been causing a steady decline in the island's nesting seabirds, particularly red and brown-footed boobies, which had once numbered thousands upon thousands, the macaques neatly finished the job, halting all reproduction on the island within just a few years. After three failed attempts, the island was finally cleared of monkeys (and black rats) by 2017.

Several controversial (lawful and unlawful) trapping and removal efforts have been put into action in Silver Springs over the decades, involving private trappers who then sold their quarry to the biomedical research industry, but were halted due to public backlash. The most recent effort, which lasted from 1998 to 2012, saw the removal of more than 800 rhesus macaques from Silver Springs and adjacent territory.

HESUS MACAQUES DON'T JUST have the propensity to inflict damage on other wildlife, but on humans too. In Asia, despite crop and bin-raiding tendencies that lead some to view them as pests, the monkeys are revered as the embodiment of the Hindu god Hanuman. People are hesitant to act against them, even offering them food in their hangouts around temples and in urban areas, which has resulted in increased aggression.

Rhesus macaques live in groups of 20 to 200

ighly active primates

"They're teaching the monkeys to approach humans," says tour guide Swander. "They know that if they go up to someone, they'll get food. But then if the next person doesn't give them food, they get upset and decide to attack. It hasn't happened yet in Florida, but I think it's only a matter of time."

Indeed, any animal-human encounter can turn from friendly to feisty in a matter of seconds, particularly when food is

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deemed small and as yet no significant

all those years ago.

Clermont and Groveland in May 2024.