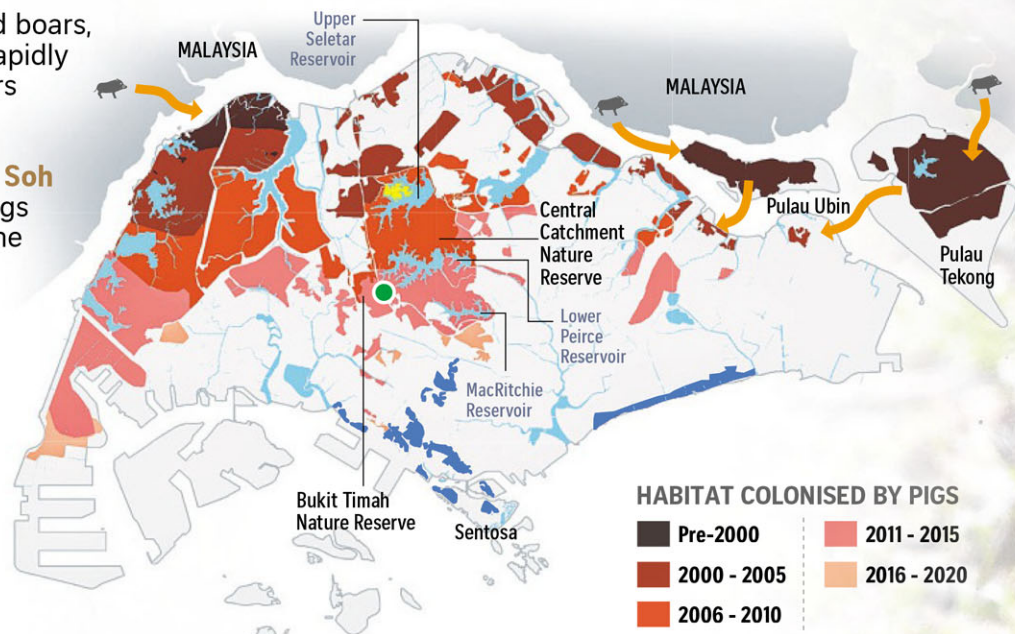


# Boar boom in Singapore

Since the 1990s, wild boars, or *Sus scrofa*, have rapidly increased in numbers across Singapore, a recent study found. **Ang Qing and Gena Soh** look at how these pigs are spreading and the authorities' plan to manage their population.



**LEGEND**

- Singapore Zoo
- Potential habitat for wild pigs
- Recolonisation pathway
- Wildlife corridor

**HABITAT COLONISED BY PIGS**

- Pre-2000
- 2000 - 2005
- 2006 - 2010
- 2011 - 2015
- 2016 - 2020

## HISTORY OF THE WILD BOAR

- The study, which used cameras triggered by motion, found that wild boars have naturally recolonised most of Singapore. Researchers also interviewed wildlife experts and park managers, and reviewed literature and media reports.
- Anecdotes suggest that wild boars were completely hunted out of Singapore by the end of the 1950s.
- It is believed that they swam back from Malaysia in the 1990s.
- Their numbers boomed in forest patches and semi-natural parks, and they often cross urban areas such as roads to find new ground.
- Forest fringes are their preferred habitat, as they provide the animals access to both human food resources and wild food as well as saplings for the females to nest.
- Currently, only forests in the far south of the island are free of wild boars, but researchers think these areas, too, will be colonised in the coming decade.



**TOO MANY WILD BOARS?**

- There are currently between five and six pigs per square kilometre and this is considered a healthy population.
- However, with the absence of natural predators and abundant food sources, an increase in population size can harm the environment. Too many wild boars can cause excessive soil erosion and overgrazing of vegetation, and affect native trees, which are uprooted for nests.

**MANAGING THE POPULATION**

**Oil palm removal**

- The fruit of the oil palm is a favoured food source for wild boars. The palms are found in former plantations such as Lower Peirce Reservoir Park.
- The presence of oil palm fruit in Malaysia led to a 100-fold increase in the number of wild boars living in adjacent forests, the researchers found.
- NParks regularly removes oil palms to encourage wild boars to spend more time foraging for food rather than mating.

**Preventing feeding**

- Humans feeding wild boars could lead to the animals associating people with food and actively seeking them out. This not only increases their food sources but also could lead to the animals attacking people.

**Culling**

- This is a last resort when wild boars turn aggressive, which can occur as a result of the animals associating humans with food.

Sources: CHIOK WEN XUAN, NPARKS, MATTHEW SCOTT LUSKIN, ADRIAN LOO, BENJAMIN LEE  
PHOTO: ST FILE STRAITS TIMES GRAPHICS

# Wild boars likely to spread islandwide in next decade if left unmanaged

Wild boars have naturally recolonised most of the viable green spaces in Singapore, except the southern forests, but are likely to do so in the next decade, a recent study has found. Published in the journal *Conservation Science and Practice* on Feb 16, the report tracing the unassisted growth of Singapore's largest wild animals at the moment is the most comprehensive study of camera trap data here in terms of duration and area covered. Within 20 years, wild boars have rapidly spread and increased in many forest patches sampled, according to the study. It involved researchers from more than 10 organisations, including the National University of Singapore and the University of Washington. The population growth comes as an abundance of food sources, the absence of predators and a complete ban on hunting in Singapore enable them to continue expanding

in numbers. National Parks Board (NParks) director of wildlife management research Benjamin Lee, who co-authored the study, said: "(This shows that) wild pigs require active management to avoid overpopulation and severe effects on the forest environment." When overabundant, they can reshape ecosystems by changing plant compositions in forests through foraging and nest building, cause local plants to go extinct and damage the forest's ability to regenerate. Dr Matthew Luskin, who co-authored the study and has researched tropical forests for more than a decade, said: "Densities reported in Malaysia can be 40 or more wild boars per sq km. When boars are that abundant, all the soil is torn up, you can see the whole forest is being disturbed. "Singapore is not like that." In 2020, the density of wild boars



A wild boar sighted near Mandai on Feb 2, 2022. Within 20 years, wild boars have rapidly spread and increased in many forest patches sampled, according to the study in the journal *Conservation Science and Practice*. ST PHOTO: LIM YAOHUI

in the Republic's nature reserves and parks was 5.22 per sq km, down from 6.57 in the previous year. Dr Luskin, who heads the Ecological Cascades Lab in the School of Biological Sciences at the University of Queensland, said the rise in Singapore's pig population has stabilised over the past five years,

partly due to intervention from the authorities. "My personal opinion is that because of the proactive management from NParks to remove supplementary food sources like trash and oil palms, I don't see... a risk of hyperabundance. "Hyperabundance really happens in forests in Malaysia that are right

next to oil palm plantations, where there is infinite food," he added. To manage wild boar populations, NParks studies their population ecology, hot spots and ranging patterns, as well as modifies their habitat, enforces against feeding and culls as a last resort. Dr Adrian Loo, its group director of wildlife management, said the

authorities gradually remove oil palms and replace them with native plant species to reduce the availability of food at wild boar hot spots. This leaves the creatures with less time to mate. "NParks also works with public agencies and developers to erect hoarding to prevent wildlife such as wild boars from straying into nearby residential areas," he added. As part of efforts to promote human-wildlife co-existence, the board discourages wild boars from being fed directly and indirectly, said Dr Loo, because this can lead to the animals relying on humans for food. The arrival of African swine fever in Singapore in early February, however, could alter the pig population's current trajectory by decimating wild pig populations here. The deadly disease, which does not infect humans and can be transmitted only between pigs, was first confirmed in Singapore on Feb 7, when a wild boar carcass in the north-west tested positive. The disease will likely decimate most pigs on the island due to its mortality rate of more than 90 per cent, said Dr Luskin. Dr Loo said: "African swine fever is endemic in the region of Southeast Asia and spreads mainly through infected wild boars and pigs, and contaminated materials. "NParks is currently studying this and closely monitoring the situation." **Ang Qing and Gena Soh**