Some 5ha of Ayer Hitam Forest Reserve is occupied by Sisfec which serves as a teaching and research facility. — Photos: LOW LAY PHON/The Star

'Eleven trails are illegal'

UPM decries trespass, finds unauthorised paths and even jungle gym in vulnerable Ayer Hitam Forest Reserve in Puchong

By FARID WAHAB and MEGAT SYAHAR metro@thestar.com.mv

THE growing popularity of nature-related activities such as hiking is putting a strain on forests and posing a threat to Klang Valley's natural ecosystem.

One such example is Aver Hitam Forest Reserve in Puchong, Selangor which has been attracting hiking enthusiasts to its lush landscape and tranguil ambience. Spanning 1,182ha, it is catego

rised as an educational and research forest, making it off-limits to recreational activities except for three permitted trails.

The reserve has garnered much interest on social media, thanks to photos of its crystal clear waters shared online.

It is currently managed by Universiti Putra Malaysia (UPM). which has been given a 99-year lease since 1996

Recently, a viral post showed several individuals trespassing into the forest reserve and splashing about in a waterfall.

This drew backlash from netizens who expressed concerns that such intrusions might cause pollution and disrupt wildlife in the forest reserve.

Adverse impact

UPM Forestry and Environment Faculty deputy dean Assoc Prof Dr Mohd Nazre Saleh said jungle trails opened up by hikers might disrupt sensitive species living in the forest.

The forest floor, he said, was often covered in thin layers of



Mohd Farhan: Bukit Wawasan hikers should watch out for signs warning against trespassing into the forest reserve.

organic matter that were cleared when a trail was created.

"These layers are made of tree branches and leaves, as well as soil, that are removed when a trail is made," he said.

"As such, tree roots become exposed to sunlight and rainwater, which may cause them to become stressed.

Prof Mohd Nazre said various factors such as topography, distance from water sources and terrain difficulty, must be looked into before opening up a trail.

Mohd Farhan Shahrin, who heads UPM's Forest Conservation Unit, said Bukit Wawasan, a popular hiking destination, was part of the forest reserve.

"Signboards are placed warning hikers against entering the forest reserve when they are on the legal hiking trail," he added.

Mohd Farhan also said a



Prof Mohd Nazre: Portions of forest reserve was used for logging activities up until the 1960s.

recent check found 14 active trails in the forest reserve.

"Only three of the trails are made by UPM, which means the rest are made by trespassers.

"Many people are unaware that a trail may affect the plants and species in the surrounding area,* he told StarMetro.

"When one trail is used, the rest must be 'rested' to give them time to recover."

Mohd Farhan's team recently also made a shocking find - a makeshift gymnasium built from tree branches.

He said invasive species were also found in the reserve, such as American bullfrog, which presented a threat to local species.

Disruption to studies

UPM Forestry and Environment Faculty dean Prof Dr



Prof Azlizam: Rapid development in Puchong increased instances of encroachment into Ayer Hitam Forest Reserve.

Azlizam Aziz said unauthorised access into the reserve could also disrupt various studies being carried out there.

"Our students and researchers are concerned this might tamper with data crucial for their studies," he said.

"Some valuable tools have also been stolen or damaged, which further complicate research

Among current studies are forest fragmentation effects, population genomics and ecology of nocturnal birds, said Prof

The faculty, he said, regularly collaborated with the Selangor Forestry Department (JPNS) and Wildlife and National Parks Department (Perhilitan) while esearch was being carried out.

"Several joint expeditions have been conducted with the aim of

Effects of trail clearing on soil health and ecosystems



branches create a natural protective



This protective layer shields microorganisms and organic matter from unlight and rainwater.

Soil contains crucial nicroorganisms and organic matter vital



Clearing trails removes this protective layer. exposing soil to sunlight

ocreased heat from sunlight can destroy



Rainwater dislodges soil and nutrients, leading to loss of



oil fertility loss may npact surrounding es and their longevity



gathering data and record keeping," he added.

Currently, some 5ha of the reserve is occupied by Sultan Idris Shah Forest Education Centre (Sisfec) that serves as a teaching and research facility.

Prof Azlizam said UPM had been actively carrying out research in the forest since the early 1970s when the faculty was first established.

Sisfec also occasionally hosted team building exercises by government ministries and agencies, he added.

The waterfall in the viral video, otherwise known as Blue Lagoon, is often used by the National Disaster Management Agency personnel for scuba diving training.

Enforcement challenges

JPNS director Azhar Ahmad said a handful of signs had been posted along the reserve's perimeter to serve as a warning against trespassing.

He said routine checks together with UPM and the police were also carried out to deter and book trespassers

"The operation involves two components - ground checks by personnel and aerial checks using drones.

"Every four months, the data on encroachment is compiled," he said, adding that the department also relied on public com-

A police report would be



makeshift gym found by UPM's forest unit inside the



A sign inside Ayer Hitam Forest Reserve warning against trespassing.

lodged against anyone found entering the reserve without permission, added Azhar.

Under the National Forestry Act 1984, those found guilty could be fined up to RM30,000 or iailed not more than five years.

He, however, admitted that JPNS faced obstacles due to hortage of manpower and funds to conduct enforcement.

Asked if there were plans to put up fences around the reserve, he said this was not

"No state has fenced up their forest reserves. "It is simply impractical due to

astronomical costs involved as the area is large," he said. Azhar also insisted that the public had a duty to learn and

know about laws and regulations on forest reserves. "Nowadays, information is easily accessible online. Look it up before you decide to go into a

Gradual decline

forest," he advised.

Rapid development in recent decades in Puchong had increased the potential of encroachment and trespassing at

Ayer Hitam Forest Reserve, said Prof Azlizam.

He said the reserve initially measured over 4,000ha, but this was gradually decreased since the 1960s to make way for devel opment projects.

"By the early 1990s, almost three quarters of the reserve was degazetted to make way for development," he said, adding that nearby residents had con tributed to an increase in the number of trespassing incidents.

Prof Mohd Nazre said the reserve was a secondary forest, with portions of it used for logging activities up until the 1960s

He said the forest used to house several animal species classified as critically endangered and vulnerable such as Malayan tigers and sun bears.

The movement restriction during the Covid-19 pandemic, he added, gave the reserve's ecosystem time to recover.

"We also found an increase in the number of animals thanks to minimal human interference,"

"When it comes to conservation and preservation of forests and biodiversity, the best measure is to do nothing.



Mousedeer (Tragulus kanchil) among species found in the reserve.

Plants found in Ayer Hitam Forest Reserve, Selangor endemic to Malaysia Medicinal plants endemic to peninsula Moss Ferns Fruit trees Bamboo Timber trees 121 Herbaceous plants The Star graphics Source: UPM Forestry and Environment Faculty.