

Pre-Fieldtrip Activity 1: Our Natural Heritage (ANSWERS)

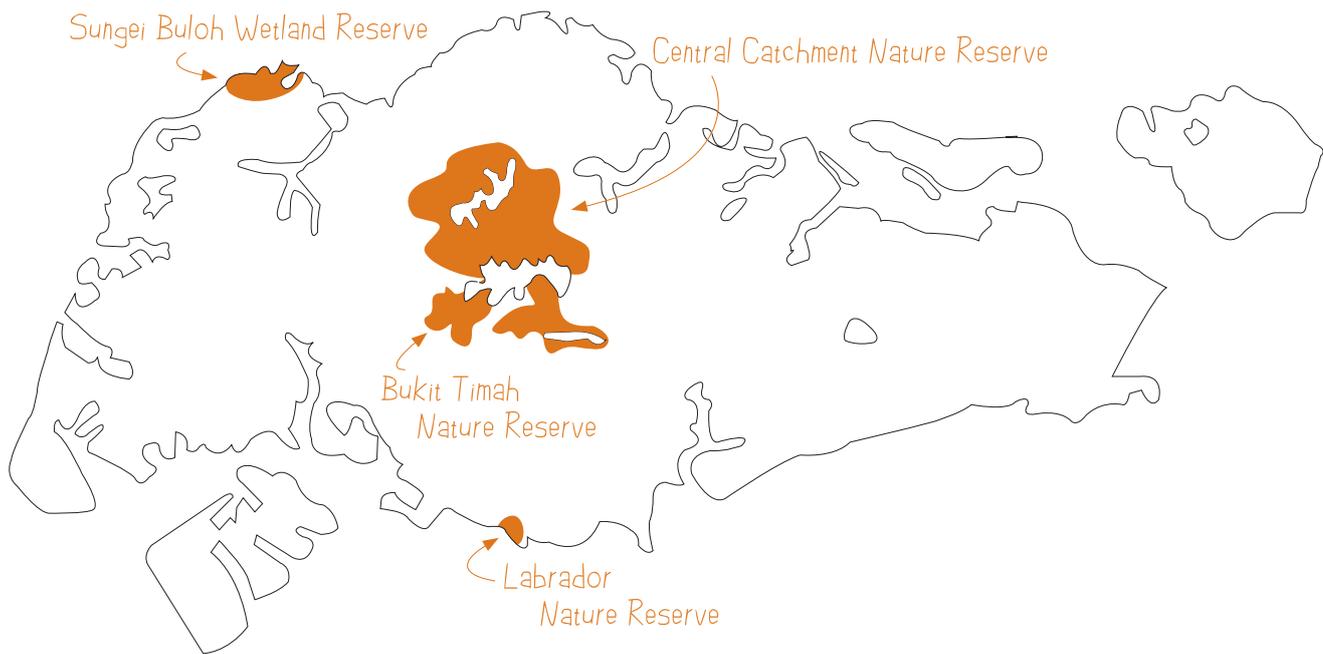
1. Define 'nature reserve'.

Nature reserve is a natural area protected by law for the conservation and preservation of native flora and fauna. In the case of Singapore, the nature reserves are protected by the Parks & Trees Act 2005 (available on NParks' website).

2. There are 4 nature reserves in Singapore (as of 2002). Using your atlas,

a). name them and

b). label their locations in the map given below.



c). Identify the natural habitat of each nature reserve and fill in the table below.

NATURE RESERVE	HABITAT TYPE
<i>Bukit Timah Nature Reserve</i>	<i>Primary Tropical Rainforest</i>
<i>Central Catchment Nature Reserve</i>	<i>Secondary Tropical Rainforest</i>
<i>Labrador Nature Reserve</i>	<i>Tropical Coastal Forest & rocky shores</i>
<i>Sungei Buloh Wetland Reserve</i>	<i>Tropical Mangrove Forest</i>

3. List down 3 differences between a nature reserve and a park near your school.

A nature reserve has greater diversity of animals than a park.

A nature reserve contains more native flora and fauna than a park.

The nature reserve's main objectives are conservation and preservation whereas a park's objective is to provide recreational grounds for people.

Most recreational activities can be conducted in a park whereas only low impact recreational activities (like walking, hiking etc.) can be conducted in a nature reserve.

4. Do you think that the nature reserves are important? Give reasons for your answer.

Yes, this is because the nature reserves are habitats for our native flora and fauna. If the nature reserves are destroyed, our natural heritage will disappear together with it. In addition, the nature reserves like the forests contain many undiscovered medicinal miracles and cures for diseases. The nature reserves are also important as it helps to regulate the earth's climate, nutrient cycle, carbon cycle and prevents soil erosion/degradation.

Any plausible answers.

5. List down and explain the threats faced by tropical forests in the world.

The tropical forests are threatened by an increase in population resulting in increasing demands for food, housing and jobs. Therefore, more land is cleared to cultivate crops, build houses and factories. Though population increase in some areas are rare and seldom, these areas are fast urbanizing and developing. Urbanisation and development are threats to the tropical forests too as these demand for more land, so, more forests will be cleared.

Any plausible answers.

6. List down and explain 3 threats faced by the nature reserves in Singapore.

The nature reserves in Singapore are threatened by

- *encroachment of residential areas. These residential areas increase the edge effects at the forest fringes. Some of these effects cause the forest to dry up as the microclimate of the forest changes due to increase in temperature and wind and decrease in humidity.*
- *high visitorship, especially when visitors come in big groups. These large groups tend to make noise and therefore, disturb the native fauna and possibly displace the native fauna elsewhere.*
- *irresponsible behaviours of visitors. This is especially detrimental when the visitors do not abide by the rules and regulations set up to conserve and protect our natural heritage. Some of these visitors will feed the animals, like the monkeys, thus, altering their behaviour. The animals will then depend on human hand-outs instead of foraging in the forest to disperse the seeds in the forest for regeneration.*
- *Other irresponsible behaviours like poaching, going off the designated trails and trampling on native flora.*