



HOW CAN WE PROTECT MANGROVES?

Objectives: Students will learn about how people around the world are working together to conserve and protect mangroves, and how they can do their part to spread awareness of this precious ecosystem.

Suggested discussions for video:

1. Why is it important for people to protect mangroves?
2. What is an effective way to restore mangroves?
3. Where are the mangroves nearest to your home or school?

Purpose of this activity:

People need nature. But it would be unrealistic to expect people to appreciate nature if they cannot see it, feel it, and therefore understand it. Ask students to think about conducting an effective guided walk in a mangrove environment for a specific audience. First they would have to do some research and then design their walk. Through this activity they will learn more about mangroves by sharing with others!

Tips for using the Activity

Step 1: Pick a mangrove site



Guiding Questions

- Do you know how to get to this mangrove site? What are the modes of transport people can take to get there?
- Is there information readily available for you to learn about the site? For example, through books, photos, field guides, and mobile applications such as iNaturalist, SGBioAtlas, eBird.



Tips

- Select a site nearest to your school and conduct this activity as a class project!
- Basic information about these sites can be found on NParks websites:
 - Admiralty Park:
<https://www.nparks.gov.sg/-/media/nparks-real-content/learning/learning-journeys/guided-walks/diy-guided-walks/roots-shoots-fruits/diy-trail-guide.pdf>
 - Berlayer Creek:
<https://www.nparks.gov.sg/-/media/nparks-real-content/gardens-parks-and-nature/diy-walk/diy-walk-pdf-files/labradornaturecoastalwalkfinal.ashx>
 - Pasir Ris Park:
<https://www.nparks.gov.sg/gardens-parks-and-nature/parks-and-nature-reserves/pasir-ris-park>
 - Chek Jawa Wetlands, Pulau Ubin:
<https://www.nparks.gov.sg/gardens-parks-and-nature/parks-and-nature-reserves/pulau-ubin-and-chek-jawa>
 - Sungei Buloh Wetland Reserve:
<https://www.nparks.gov.sg/gardens-parks-and-nature/parks-and-nature-reserves/sungei-buloh-wetland-reserve>



Step 2: Map your route



Guiding Questions

- If you were on a nature walk, what are some things that you may look out for on a map?
- Is there a wet-weather plan if it rains after the walk has started?



Tips

- There are typically maps of all accessible parks in Singapore from NParks. Use these maps for reference but students should feel free to add personal touches to their maps!

Step 3: Conduct research on stories to share



Tips

- The best guided walks are filled with personal stories. Don't forget to include your firsthand sightings and experiences as stories to share!
- Number your points, so that you can plot them on your map in Step 2 if possible.
- For reference, an example of a wonderful community-created Padlet about Sungei Buloh Wetland Reserve by the Friends of Buloh:
<https://padlet.com/azmimohamed/sungei-buloh-wetland-reserve-cyw79tfwwm6e8b4a>

Step 4: Finalise details of your walk



Tips

- Not everyone is used to being outdoors and in a mangrove forest, so preparing information such as this would be very useful for them.
- Preparing in advance also means reducing the need for disposables e.g. water bottles, vending machine snacks – which could also help to prevent any conflicts with animals that tend to be attracted by these items!

Step 5: Trail etiquette



Tips

- Suggestions:
 - Wear long-sleeved shirts and trousers if you are sensitive to sunlight or insect bites. Avoid spraying insect repellent inside parks and reserves to minimise negative impacts on inhabitants.
 - Dispose of litter only in rubbish bins.
 - Stay on trails and boardwalks – this protects mangrove roots and animals.
 - Take nothing but photos – it is an offence to collect wildlife specimens from parks and reserves without a research permit.
 - Keep noise levels to a minimum, so that wildlife will not be spooked and you'll be able to spot more of them.
- Leave No Trace recommends 7 good principles of good outdoor etiquette:
<https://lnt.org/why/7-principles>



A great way to learn to be a good nature guide is to join a nature walk! There are numerous opportunities to learn about and see mangroves in Singapore with a guide. Check out these local community groups and organisations that run mangrove walks:

1. Naked Hermit Crabs:
<https://nakedhermitcrabs.blogspot.com>
2. Restore Ubin Mangroves Initiative (R.U.M. Initiative):
<https://rum-initiative.blogspot.com>
3. Nature Society (Singapore):
<https://www.nss.org.sg>
4. Lee Kong Chian Natural History Museum:
<https://lkcnhm.nus.edu.sg>
5. NUS Toddycats:
<https://toddycats.wordpress.com>
6. Cicada Tree Eco-Place:
<https://www.facebook.com/cicadatreeecoplac>
7. Young Nautilus:
<https://youngnautilus.com>
8. Nature Adventures SG:
<https://natureadventures.sg>