

Cat 4 Resource Development

Group 4-046

Project Ferox 2021 Written report

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Abstract:

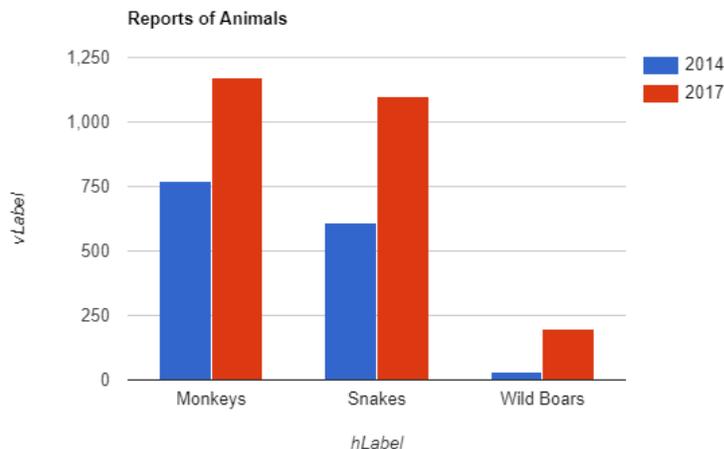
Project Ferox aims to raise greater awareness about the reasons why wild animals attack humans and how to prevent it and educate the public on what to do in situations involving wild animals.

Rationale:

In recent years, there are issues of wild animals attacking people in Singapore. As such, animals are being culled. As a group, we feel that culling is not a suitable way to solve this problem. In this project, we hope to tackle the problem in its roots, which are in line with our goals.

Research:

Reports of Animals causing trouble in 2014 and 2017:



- ❖ Rise in the number of cases from 2014 to 2017
- ❖ Most coming from monkeys and snakes

Reasons for human-animal encounters:

1. Unsustainable wildlife population growth

Wildlife population size increases as animals breed in response to abundance of food. However, this population growth is unsustainable because the habitat area remains the same. Consequently, the increased competition within and among the different animal species may force some animals to venture out of their natural habitat and into human-occupied areas, where they would not survive.

2. A change in wild animals' natural behaviour

For example, wild boars are shy animals that inhabit dense forests. Feeding of wild boars may encourage them to venture out of their natural habitats, putting them in close proximity to humans.

3. Feeding of wild animals

Animals exhibiting increased aggressiveness towards humans in order to obtain food, as the animals associate humans with sources of food. Changing animal activity levels. Animals may become more active during hours when feeding occurs. Animals moving to new habitats, including urban areas, which may hinder human activity and endanger the animals.

Why is this a problem?

Stray and wild animals are usually not vaccinated, which may lead to the transmission of rabies and other life-threatening diseases to other animal populations or even humans. Wild animals may attack humans as we usually try to feed them and if they are not satisfied they may turn aggressive. They may also cross into other habitats and become an invasive species towards the ecosystem. Below is an infographic on the reports of animals from 2014 to 2017. Solutions to limiting human-animal interactions for safety reasons are culling to minimise animal populations. For example, 80 wild boars were culled in 2014 to improve public safety and to reduce the animals' damage to the vegetation.

Case Studies:

THE STRAITS TIMES SINGAPORE

LOG IN SUBSCRIBE PDF

Python bites woman on second floor of HDB block

Sembawang resident was searching for cat among potted plants when she was attacked

A case of a python injuring a woman in Sembawang

From wild boars to macaques, 4 attacks and other incidents related to feeding Singapore's wildlife



Monkeys and even boars injuring people



Singapore

Wild boar caught in Punggol, 2 people injured in the process

A wild boar was ravaging through Punggol and had injured two people. It was then captured and humanely euthanized.

- ❖ Through these case studies, we can see that wild animals interacting and sometimes injuring people are not uncommon. These instances prove that one should know how to react and not get injured when coming face to face with a wild animal. Our project can serve as the platform to help educate these people so that they can avoid such situations.

Comparing to other websites:

- ❖ Below is an image of a website published by nParks, a wildlife organisation. To get to the desired information, there are a lot of steps needed to get to it, and users may find it hard to navigate. It is also hard to navigate and the public is not very aware of all these. What we hope to do is create a more accessible and condensed website that provides useful information.

[Otters](#)
[Pangolins](#)
[Snakes](#)
[Wild Boars](#)
Designated Smoke-free Areas
[Parks and Trees Act](#)
[Parks with 'No Flying' Signs](#)
[Park Connector Network Etiquette](#)
[Use of PMDs and e-bikes in Parks and Park Connectors](#)
[Etiquette when visiting Sisters' Islands Marine Park](#)

Damages caused by wild boars

With a lack of natural predators, the wild boar population has increased rapidly and may negatively affect our forests' regeneration. High numbers of wild boars may also decrease local biodiversity.

Their natural behaviour to dig up the soil in order to find food, thus damaging tree saplings compromises reforestation and habitat enhancement efforts. These can have negative impacts on the long-term viability of small patches of forests such as our nature reserves if the wild boar population remains unchecked.

What to do when I encounter wild boars?

- **Be calm and move slowly away from the animal.** Do not approach or attempt to feed the animal.
- **Keep a safe distance and do not corner or provoke the animal** i.e. by using a flash while taking pictures of it.
- **If you see adults with young piglets, leave them alone.** These are potentially more dangerous because they may attempt to defend their young.

If you have further queries, please contact us through our online feedback form at <https://www.avs.gov.sg/feedback>.

Photos by Nick Baker

Ask James @ NParks

SHARE

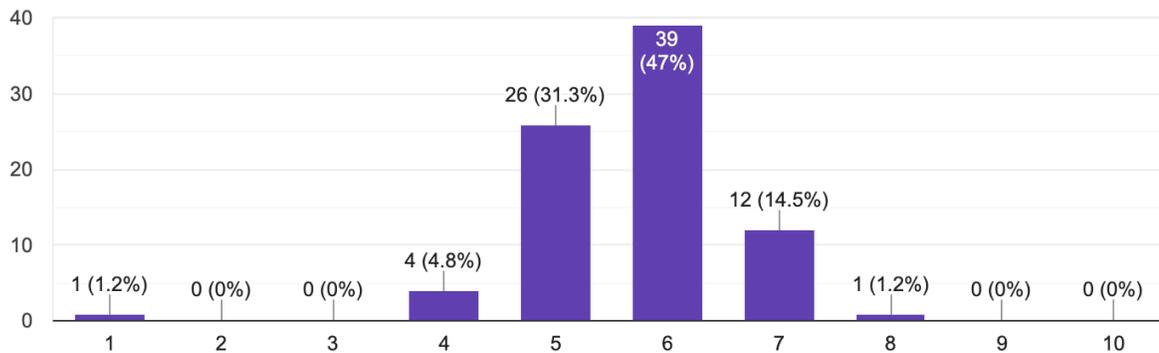
Last updated on 26 March 2021

Share this page

Needs analysis:

How well do you think stray/wild animals are being treated?

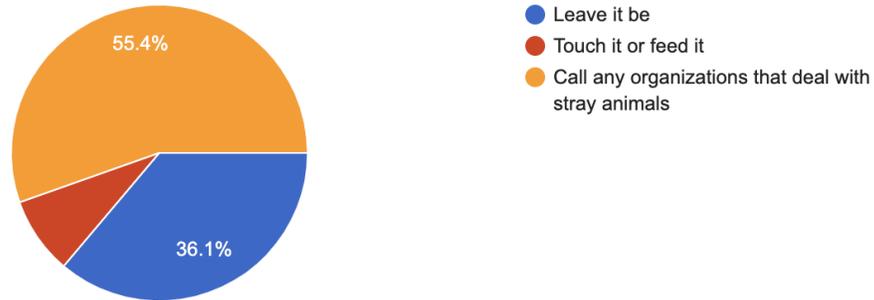
83 responses



Many people believe that wild animals are being treated fairly well. They are indeed not wrong, most of the stray and wild animals in Singapore are quite well taken care of by the different organizations in Singapore. However, this does not apply to all. Many people are still unaware of the mistreatment of several wild animals in Singapore.

If you see a stray/wild animal within your area, what would you do?

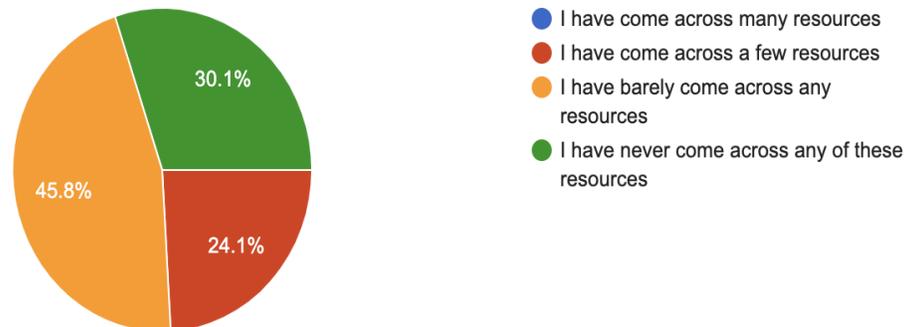
83 responses



Most people know how to correctly deal with situations when they see a wild animal within their area, which is to immediately call any organisation to deal with wild animals. However, some of them do not know how to properly handle them. Like when we see a wild boar on the road, which is prevalent in Singapore.

Have you come across resources which educate people on wildlife? (Websites, infographics)

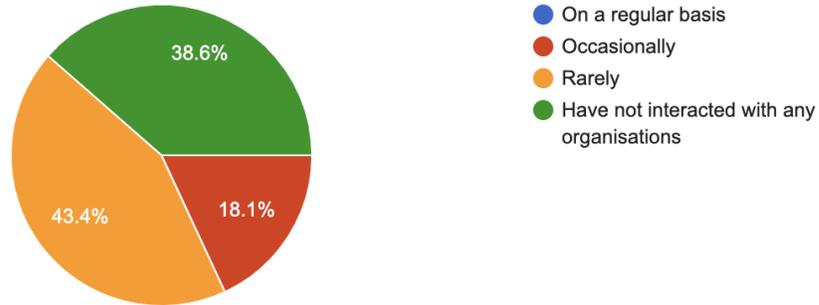
83 responses



Most of the people do not have the chance to encounter certain wildlife resources, like websites, infographics or social media accounts based on wildlife. Those who have encountered these websites may be due to advertisements that have certain information about these wild animals.

How often do you interact with organisations regarding wild animals? (Etc donations, volunteer work, conferences)

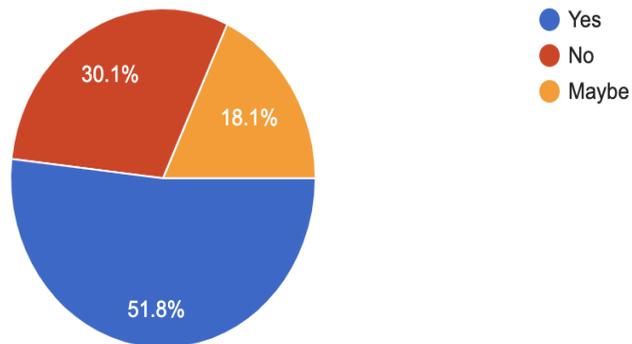
83 responses



There are many organizations that support wildlife conservation like SPCA, SOSD and many others. They often have certain fundraising activities across the country and others, like open-houses or virtual conferences about these animals. But clearly, not many people have the chance to interact with these organizations.

Will you ever revisit these resources again?

83 responses



Based on the graph, there are many people who are willing to revisit resources based on wildlife. We can see that most of the people are supporting the awareness of the animals, and hence, together with our resources, this indicates that there is much support for our project, and will therefore, garner people's agreement and achieve success to raise awareness for wildlife.

Objectives:

1. Raise awareness on the reasons why wild animals attack humans and how to prevent it
2. Educate the public on what to do in situations involving wild animals

Target audience:

1. Students
2. General Public

Our Resources:

-Acres

We have partnered with Acres, a government wildlife organisation, which aims to help the wild animals in Singapore. We will work with them to gain reliable information and use it in our project, as well as help them gain awareness and attract more people to work with them. We will do these via interviews and talks. Overall, both parties will obtain the objective of creating more awareness for wild animals. Originally, we had planned for a visit to their rescue centre to get information on wild animals in person, as well as to have an interview with the rescue officers there. However, due to the Covid-19 situation, we were unable to visit the rescue centre, and instead had a virtual interview with the wildlife officers. Our talks were also held online with the general public, with Acres helping us attract people to attend.

Here is a photo we took in an interview with ACRES:



We uploaded this on our Instagram page. As the interview was quite long, we split the interview into different sections and posted it separately.

-Website

Our website is a consolidation of all our resources, offering detailed information, infographics as well as an in depth look at our collaboration with Acres. The information in the website will contain detailed information about the wild animals in Singapore as well as the steps to follow when encountering them. The links to our instagram page as well as the website of the organisation we are partnering with. For our website, we have also included posters, interviews with the wildlife officers, and as well some videos that we have created.

The screenshot shows the top two sections of the Project Ferox website. The first section, titled "About Our Project", has a dark grey background and contains introductory text about the project's mission to raise awareness about wild animal attacks. The second section, titled "Why?", has a light green background and explains the rationale behind the project, noting that culling is not a suitable solution. The third section, titled "Our Team", features a background image of a forest and introduces the core team members with their names and roles: Ng Ching Hao (Leader), Gan Eu Jin (Administrative Head), Jovan Woo (Logistics Head), and Yap Yu En (Publicity Head).

Hotspots for wildlife encounters

1. Bukit Timah Nature Reserve

Experience nature in its pristine form at Bukit Timah Nature Reserve, which is a mere 12 km from the bustling city centre. By virtue of Singapore's location on the equatorial belt, the reserve has one of the richest and most diverse ecological systems. Visitors will see an astonishing variety of plant, animal and insect life, typical of a humid equatorial climate.

This 163-ha reserve includes Singapore's highest hill, Bukit Timah Hill, which stands at 163 m and retains one of the few areas of primary rainforest in the country. The forest on the hill has been a botanical collection ground for more than a century, and the first known specimens of many species of Malayan plants have been obtained here.

Home to a high percentage of our nation's (native) flora and fauna, Bukit Timah Nature Reserve has been a favourite spot for those looking to get close to nature. Some of these flora and fauna species include the Shorea curtisii, Red Dhup (Parishia insignis), Greater Rocket-tailed Drongo (Dicrurus paradiseus) and Malayan Colugo (Galeopterus variegatus).

[Click here for directions to Bukit Timah Nature Reserve](#)



What to do when encountering the different animals in Singapore?



This segment is for you to understand the steps to take if you were to encounter the different types of wild animals in Singapore. We encourage everyone to take the time to read and understand the steps as human-animal encounters are becoming more frequent in Singapore. Remember, you spot a wild animal in trouble or causing trouble, please contact Nparks at 1800-476 1600 or ACRES at 97837782.

- Wild Boars >
- Snakes >
- Monkeys >
- Otters >

Wild boars



Wild boars are a common sight in the nature reserves of Singapore. If you were to adventure into the forests of Singapore, there will be high chance of encountering one. In that case, what should you do?

Posters



CIVETS IN

PIED

Videos

Acres Interview



Is it tough to cope as a
wildlife officer given
the current covid
situation?



More Videos

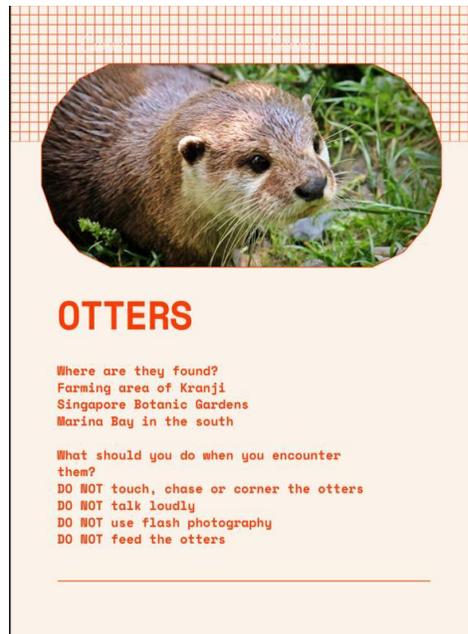
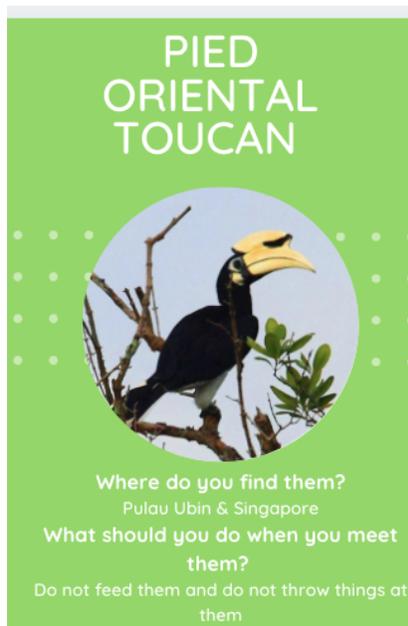


<https://ganeujin1.wixsite.com/project-ferox>

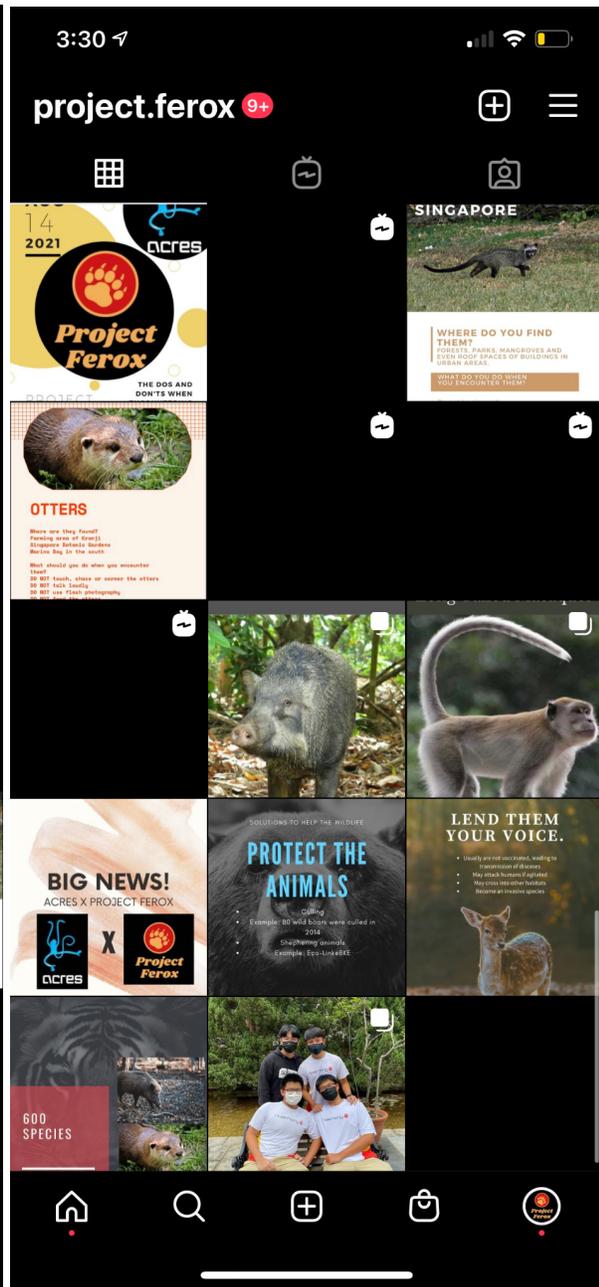
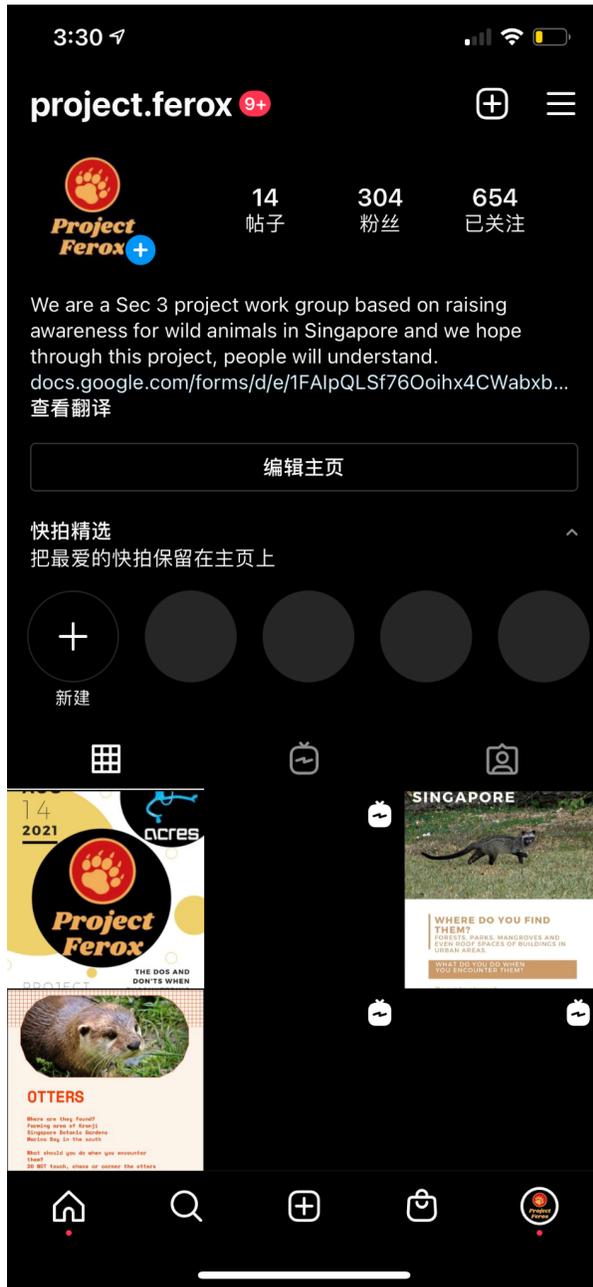
-Instagram page

Our Instagram page is more catered towards the students, providing interactive quizzes, fun facts and e-pamphlets, delivering brief and concise information. Our Instagram page serves as a platform to deliver bite-sized information on wild animals, and to reach out to our target audience. It enables us to convey announcements like the details of our talks etc.

Examples of our poster:

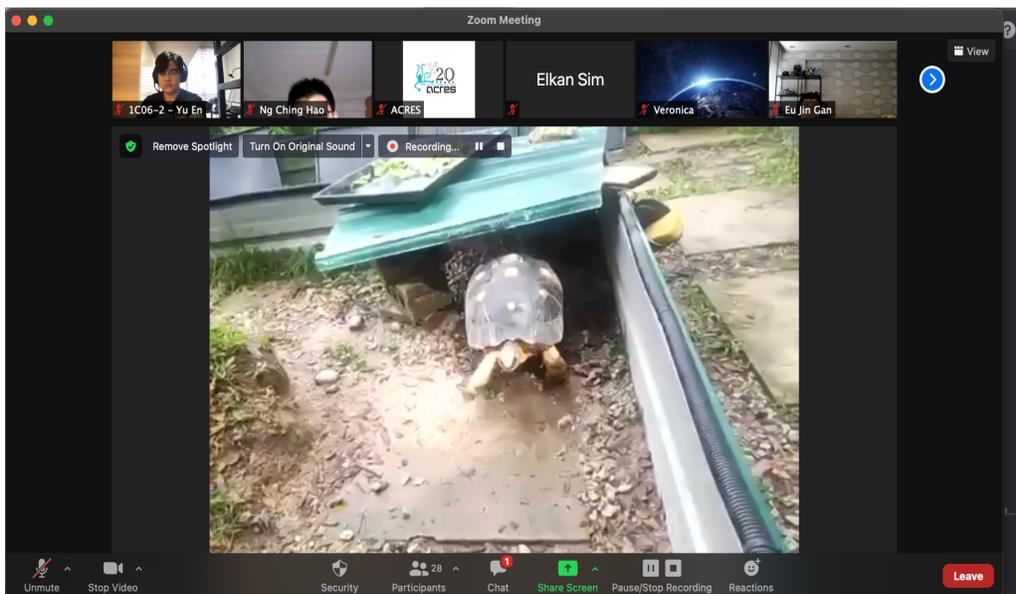
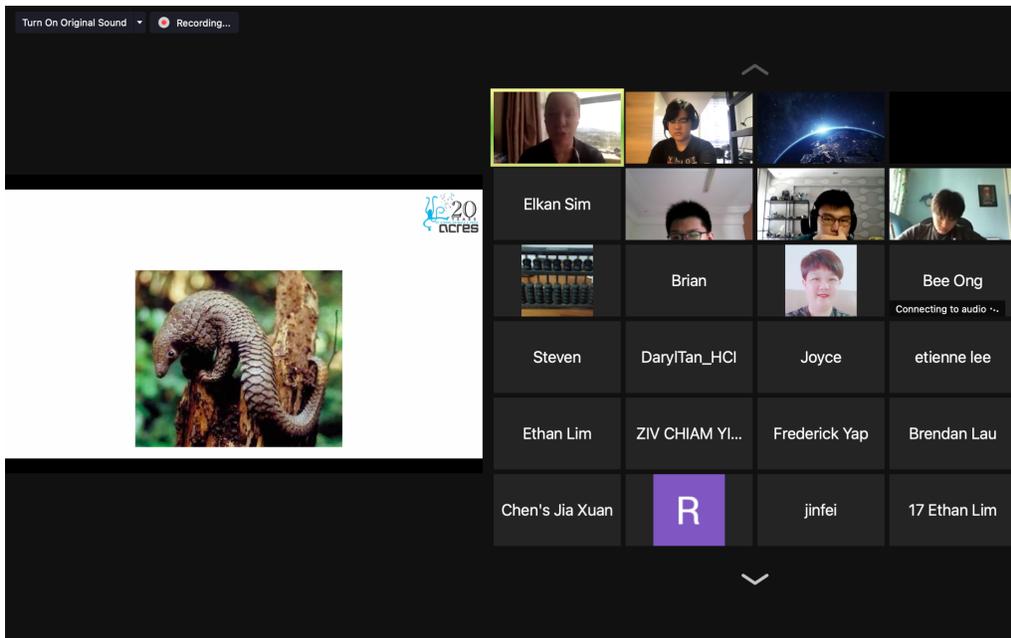


Our Instagram page:



-Talk with the public

In partnership with ACRES, we held a talk online through ZOOM. The topic of the talk was “The Dos and Don’ts when encountering a wild animal”. We managed to learn more about Singapore’s wildlife and even had a chance to do a virtual tour of the ACRES facilities. Through this talk, we hoped that the public can be more aware of the actions to take when they see a wild animal. In addition, the talk also acted as a fundraiser for ACRES to accept donations. Overall, it was a win-win situation as our project got more exposure to the general public and ACRES could get the funding they needed to continue with their operations. Here are photos from the talk:



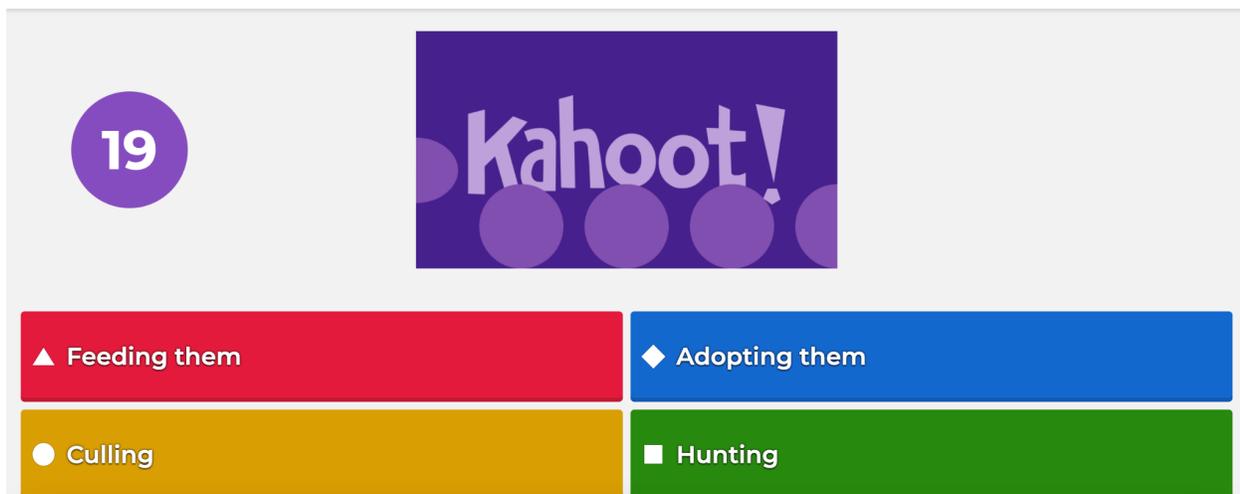
Pilot Test:

Our pilot test consists of two parts. Due to the Covid restrictions, we were not able to carry out face-to-face activities and everything had to be done through online platforms. Hence, our pilot tests actually consist of a kahoot to test the understanding of people's knowledge as well as a google form.

This are pictures from our kahoot:

Jinfei	1	 88%	—	6 752	⋮
qh	2	 88%	—	6 403	⋮
hm	3	 75%	—	5 898	⋮
jon	4	 75%	—	5 893	⋮
ant	5	 75%	—	5 573	⋮
Daryl	6	 75%	—	5 566	⋮
et	7	 75%	—	5 513	⋮
ksi	8	 63%	—	4 890	⋮
Jk	9	 63%	—	4 728	⋮
elkan	10	 63%	—	4 642	⋮

What are some solutions to help the wildlife in Singapore?



19

Kahoot!

▲ Feeding them

◆ Adopting them

● Culling

■ Hunting

How many different species of animals are there in Singapore?



19



▲ 200

◆ 300

● 400

■ 600

What should you do when you meet otters?



18



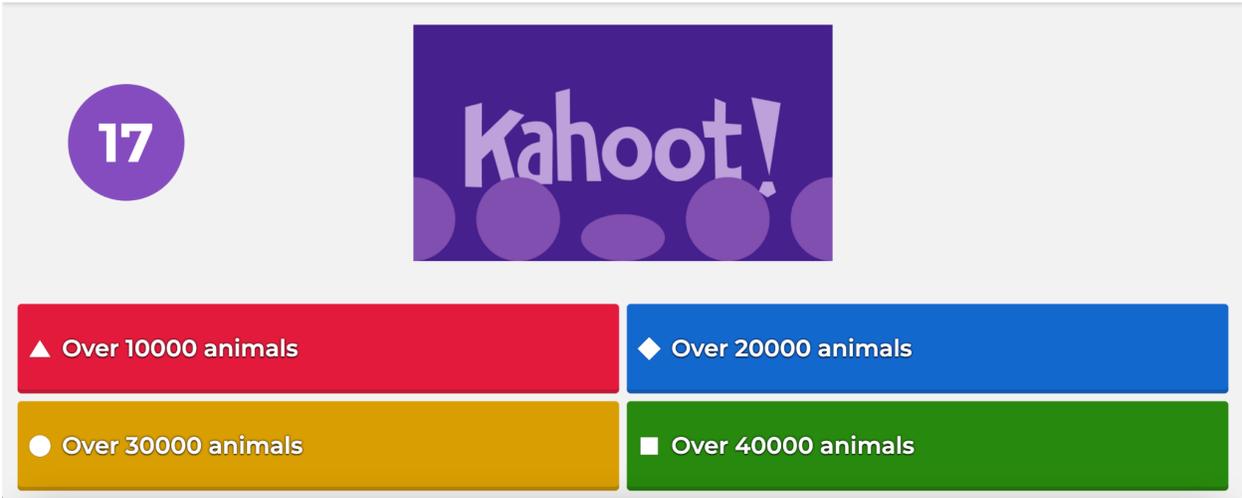
▲ Feed them

◆ Take photos with FLASH ON

● Try to touch them

■ Stay calm and walk away

What is the wildlife population in Singapore?

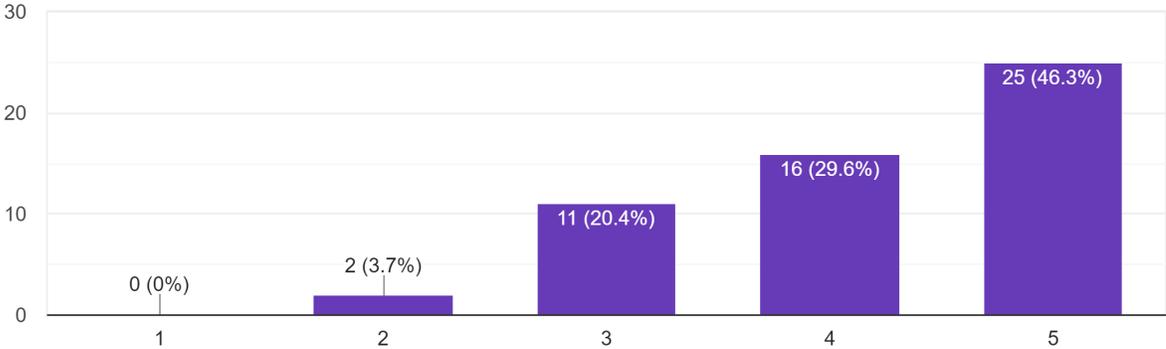


In conclusion, our kahoot was part of our pilot test to see whether our resources, such as our instagram, website and collaboration with Acres, was effective in teaching our target audience more about Singapore’s wildlife. Based on our kahoot, we have come to a conclusion that our target audience actually managed to gain much knowledge about the wildlife and have new information about them.

These are feedback for our website:

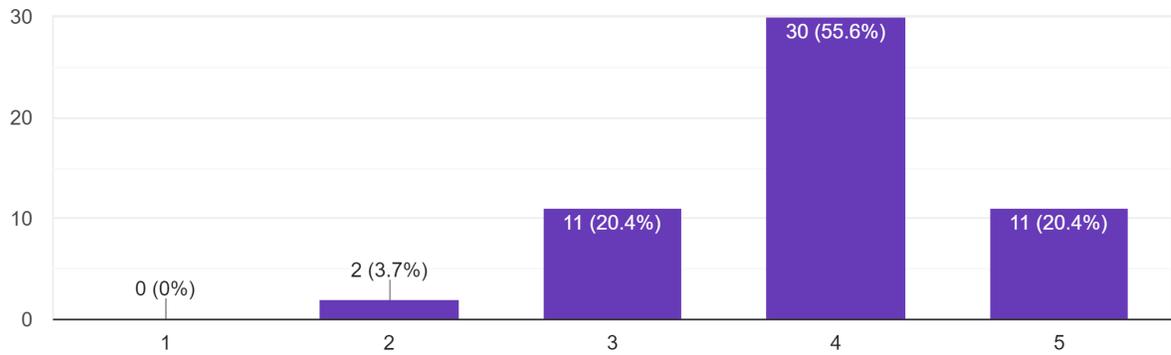
On a scale of 1-5, how is the layout of our website to your liking?

54 responses



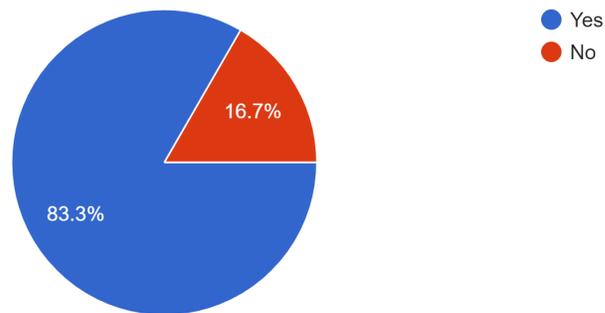
How easy was it to find your desired information?

54 responses



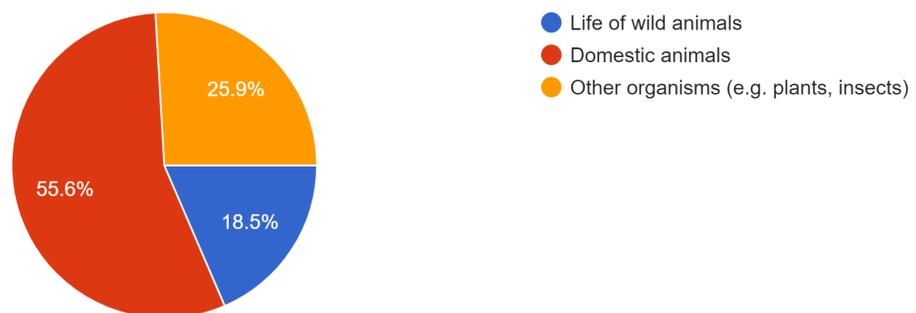
Did our content help you in learning more about wild animals?

54 responses



What other content would you like to see?

54 responses

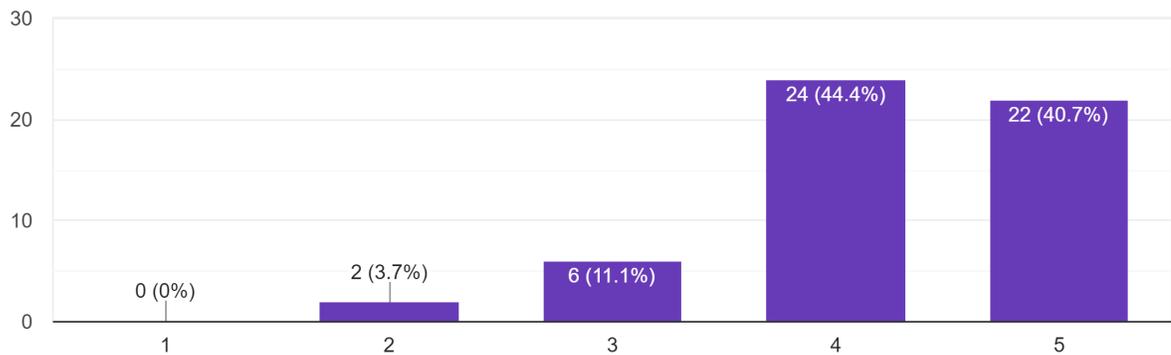


In conclusion, our website has a layout which many people like, and find easy to navigate. Many also think that the website was informative and managed to help them learn more about encounters with wild animals. Some additional information we could provide in the future could be on domestic animals or an in-depth look into the life of wild animals.

These are feedback for our Instagram page and collaboration with Acres:

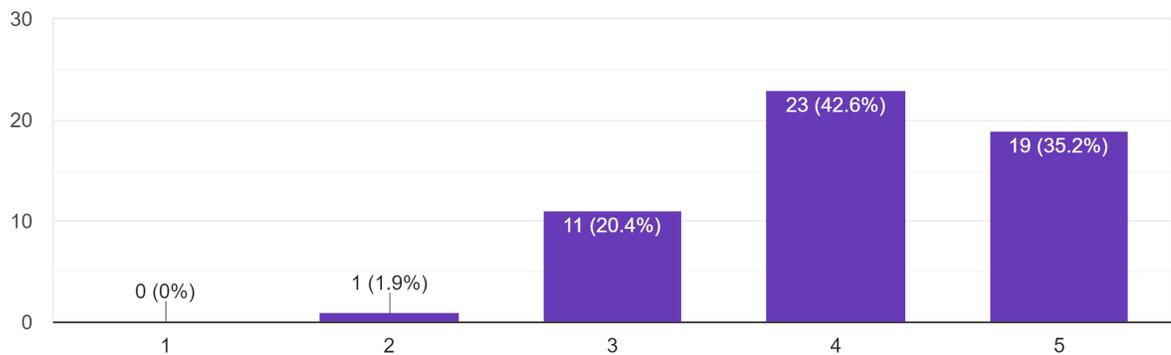
On a scale of 1-5, how useful did you find our instagram posts?

54 responses



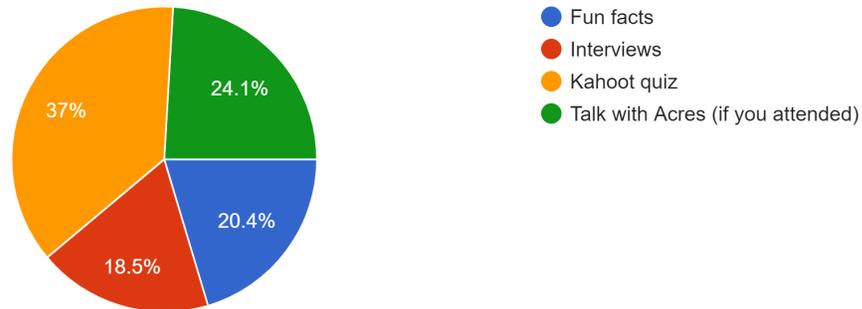
On a scale of 1-5, how original were our posts?

54 responses



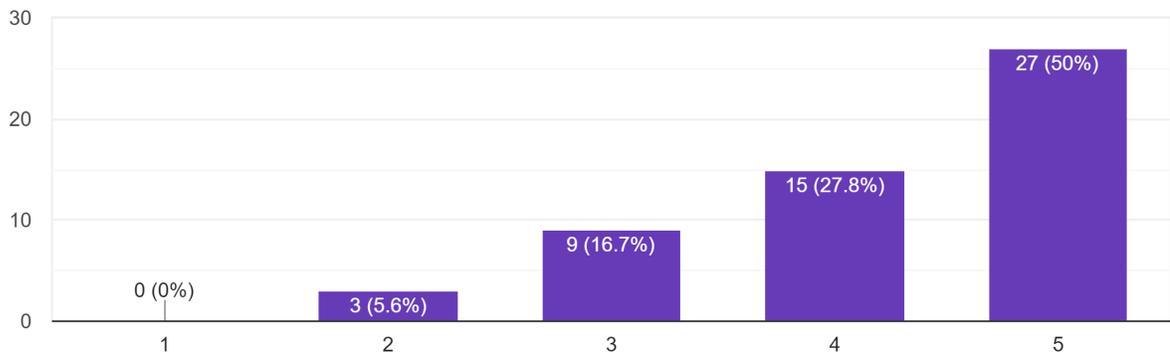
What was your favourite type of content?

54 responses



How effective do you think our collaboration with Acres was?

54 responses



In conclusion, our posts were able to provide bite-sized information which spread awareness for the wild animals. Our information was partially received from Acres, hence providing a source of reliability, which most found useful. One thing we can improve on is the interactivity aspect, which was unfortunately downplayed this year due to Covid-19.

<https://forms.gle/vizS92sG7GKJxumW9>

Outcome:

Wrapping up our project, we believe that it has been a successful journey, with an amazing outcome. Due to the pandemic, we had limited pilot testing, but still received excellent feedback.

Overall, we believe that our project has well achieved its objectives, successfully being able to educate some members of the general public on the types of wild animals in Singapore and what to do when encountering them.

Even though some may argue that our project has a small outreach and was ineffective, we were planning to visit the center and have more interaction with the animals and the wildlife rescue officers there, learning more about the lifestyle they have. However this was not possible due to the covid situation which limited our interaction with others outside of school.

Should we continue to work on this project, and without the restrictions from the pandemic, we believe that executing our initial ideas would enable greater outreach of our project, and hence further accomplish our objectives.

Conclusion:

Over the course of the project work year, we have come to realise while the journey sure was a rocky one, it was indeed very fruitful.

Amidst the Covid-19 pandemic, many restrictions further amplified any challenges we faced in our project.

From not being able to meet each other face to face, to unable to have any interaction with animals in the wildlife center, there were many changes the pandemic brought about, hence we could not conduct our project as per normal. However, this also gave rise to our determination and our dedication to the project. We have grown to realise that adaptability is key in undertaking a difficult project.

Sure, there were setbacks, but we managed to make solutions for our current situation (such as by using video conferencing), and proceeded from there. This has also inculcated a growth mindset in us. Instead of seeing a setback as a failure, it is, rather, a sign for change, where we question ourselves whether there are better solutions to the issue posed.

All in all, we never gave up in the face of adversity, and learned how to improvise, adapt and overcome predicaments.

References:

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