Exemplar for internal assessment resource Education for Sustainability for Achievement Standard 90810

Student 5: Low Achieved

NZQA Intended for teacher use only

After looking at environmental issues I have decided that an issue to contribute to is Possum numbers. This is a big problem in Fiordland and also farmland.

## Research

[In its native land the possum is up against dingoes, bush fires and less palatable vegetation. In New Zealand there are no predators and lots of very palatable vegetation. As a result, possums have a huge impact on New Zealand ecosystems. The Australian brush tailed possum was introduced into New Zealand in 1837 to establish a fur trade. Adult possums are typically between 65 and 95 cm in length, and can weigh anywhere between 1.4 and 6.4 kg. Forests are the major habitat, especially hardwood mixed forests, where possum densities are particularly high. Forest/pasture margins are also known to support very dense populations. While possums feed mainly on leaves, they are also known to take buds and flowers, fruits, ferns, bark, fungi, invertebrates, native birds and eggs, land snails and carrion. The damage to native forests can be seen all too clearly in many areas. Possums ignore old leaves and select the best new growth. In some areas they have eaten whole canopies of rata, totara, titoki, kowhai and kohekohe. Possums compete with native birds for habitat and for food such as insects and berries. They also disturb nesting birds, eat their eggs and chicks and may impact on native land snails. Dairy and deer farmers have the added worry of possums spreading bovine tuberculosis.] <a href="https://www.doc.govt.nz/nature/pests-and-threats/animal-pests/animal-pests/animal-pests-a-z/possums/">https://www.doc.govt.nz/nature/pests-and-threats/animal-pests/animal-pests-a-z/possums/</a>

This information from the DOC website gave me good information on possums and helped me to decide whether or not to trap for a sustainable action that contributes to the environment.

The DOC website states that possums are a problem because they eat native bush and also help to spread TB to farm animals. This is a huge problem in NZ because it effects our two biggest sectors our farming sector with the TB and the tourism sector with the possums eating our native bush. So I will find a way to eradicate possums from our bush by either using trapping methods or another method either way I decided to consult a professional.

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I decided to consult a member of DOC to find the most effective way to trap and also monitor the possums, on the 15<sup>th</sup> of March I talked to Mr M from DOC to get the information we need. Mr M told us that the best way for us to monitor possums is to use wax tags and he said he can supply them, these are the best for us because they are cheap and simple to set up. Mr M was able to give us a few hundred wax tags which will be more than enough to set up a decent monitoring system I will put out twenty for two days then trap and then put out another twenty for the next two days.

This picture to the right is the wax tags that Mr M supplied to us and they are the ones that I used for my possum monitoring.

## Reflection.

From the table we are able to see that I wasn't able to completely get rid of the possums but I was able to make a considerable "dint" on the amount of possums in the area as we can see from the table. The max amount of wax tags bitten was 80% which is 16 tags bitten then the maximum tags bitten at the end was 20% which is 4 tags bitten. From this data I am able to say that my action was a success at decreasing possum numbers in the area.



I think that if I wanted to make a proper meaningful action towards sustainability possum trapping is a great idea, I found that spending even a few days trapping can make a significant contribution towards stemming possum numbers. A few things I would change for next time is I would run a bigger trap line of around 25 traps, and I would get other people involved in the trapping process this would ensure that there would be trappers after me and the process would carry on. 7 I found that the Wax tags were also very helpful in locating where possums were and what trails they take.

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## Conclusion

In conclusion I believe that I made a small scale contribution to the cause of sustainability, but I believe that it is also very effective and I believe that if more people would decide to trap the possum numbers would steadily decline. To conclude in order to help our natural environment I believe that possum trapping is a must to reduce numbers of this pest so as to lessen the damage on native flora and fauna and to New Zealand's natural environment.

This is a 3D view of the tree lane and plantation where I will trap, I have chosen this spot because it is



a place where it is known to have possums in the trees. It is also on farmland so if I kill any possums it will help towards stopping the spread of TB to farm animals.

**Timeline:** 25<sup>th</sup> of March 2016 I will place wax tags in place for two days. 27<sup>th</sup> of March 2016 I will put traps in place for two days. 29<sup>th</sup> of March 2016 I will put wax tags in place for two days.

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These are the pictures of the wax tags set up, I had them sitting at about 30cm off the ground where a possums head height would most likely be, I also had one nail through the hole at the top and I didn't need to use baits because the wax tags are good enough as bait by themselves, I spread the tags out about 10 metres between each one and had them in a tree lane that was a mixture of pine trees and gum trees.



In the next two days I reset the tags and recorded how many of the tags were bitten by the possums.





