

# **Highly Commended**

# Citizen Science Primary

### The Year 3 Sealion Class KICE The Year 3 Glossy Black Class KICE

### Kangaroo Island Community Education





Department of Defence





### **Insects on Kangaroo Island**

Year 3 Sea Lion and Glossy Black classes Kangaroo Island Community Education

## Project ID: 0278-040

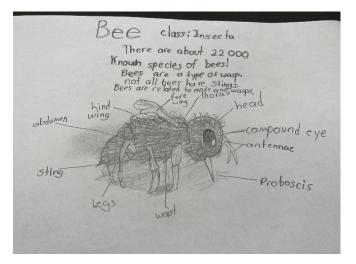
#### What We Did

We, the year 3 Sea Lion and Glossy Black classes from Kangaroo Island Community Education (KICE) chose to explore the kinds of insects we have on Kangaroo Island. We were inspired by Dr Rachel Pillar and the year 7 and 8 classes who collected data as part of an Insect Investigators project in 2022. We wanted to collect our own selection of insects and compare our data to the information the other classes found.

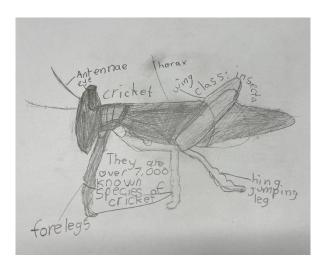
#### **The Process**

**Step 1**: We did some research on insects and how they are classified. We learned about the morphology of insects and how insects can be compared and classified. Part of our research was looking at preserved specimens which we then sketched and labelled.





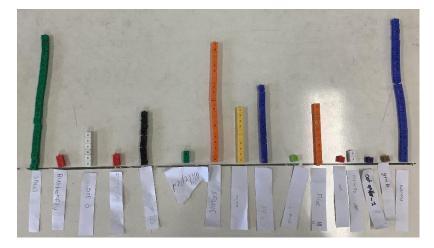




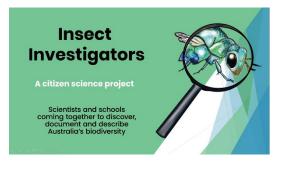
**Step 2:** We went looking for bugs in the school yard and caught them using bug catchers that had been donated to the school as part of Insect Investigators. The class decided the teacher should keep track of what we find using tally marks so we could use the information later.

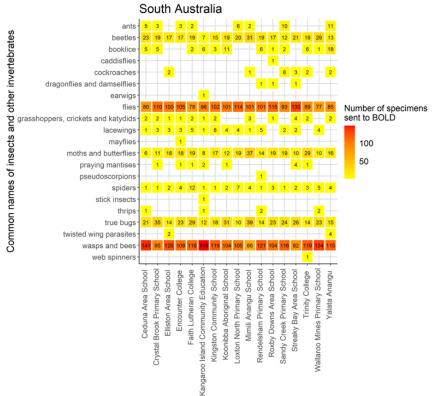


**Step 3:** We used the tally marks to make a graph of our results. We also made a table of results directly comparing our data with the Insect Investigators data.



Step 4: Dr Rachel Pillar visited and presented the Insect Investigator data to us from 2022.





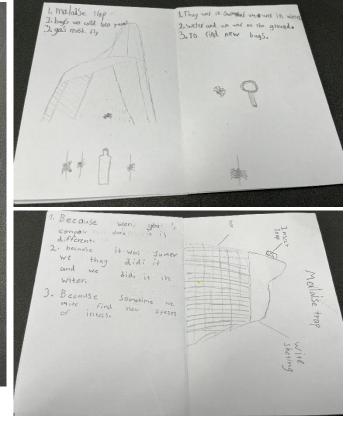
Schools

Our Research	
Worms	26
Caterpillar	1
Slug	1
Snail	24
Spider	13
Flies	11
Ants	12
Grubs	1
Bee	6
Millipede	3
Earwigs	2
Slaters	21
Butterfly/moth	1
Stink bugs	9

Step 5: We compared the two data sets and recorded our findings in our Insect Investigator Books.

Insect Investigators	
Worms	0
Caterpillar	0
Slug	0
Snail	0
Spider	1
Flies	96
Ants	0
Grubs	0
Bee	148
Millipede	0
Earwigs	1
Slaters	0
Butterfly/moth	8
Stink bugs	0





#### What We Learned

We learned many things about insects, their observable features, morphology, and the types of insects that can be found on Kangaroo Island. Based on what we already knew about insects we were able to suggest why these insects are important to our environment.

'The insects help the soil and help the plants to reproduce' – Alby 'There are different kinds because there is lots of weather change' – Levi

We also learnt about ways to represent data by constructing column graphs and other types of graphs. We were able to draw conclusions based on the data and explain why they might have happened. We thought carefully about the variables that may have impacted the data and talked about whether it is fair to compare these data sets. We decided that to compare data accurately we need to do more research.

'We used bug catchers, but they used a Malaise Trap' – Rhylan

'Worms were the most common for  $\mathsf{us'}-\mathsf{Brax}$ 

'We can discover how different traps work. Air traps get air creatures, floor traps get floor creatures' -Jared

'It is different because they used their Malaise Trap in Summer' - Rubi

'When you compare the data it is very different' - Emily

'They found more flying insects because it was Summer when they did it' - Belle

'I noticed we found more worms than bees because it was a rainy day' - Alyssia

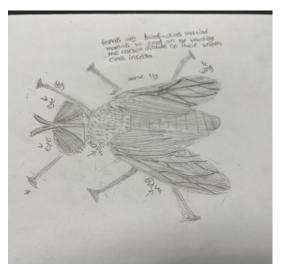
'I learned form Dr Pillar that they [insect collection] change depending on the weather' – Zach

'The big kids went to the bush but we just stayed at school' – Ilithyia

When Dr Pillar visited us she explained that Insect Investigator group discovered a new species of parasitic fly on Kangaroo Island. We learned that new species of insect are identified by their physical features first, just like the features we looked at in the beginning of our research. Then they go through different testing by scientists, including DNA testing.

Two representatives (Ilithyia and Levi) from our classes were able to go along to a Zoom meeting with the year 7 and 8 students where they met with taxonomists to discuss naming the species. Our previous learning of morphology of the fly developed students' technical vocabulary and understanding of how new species get names and described. Using this knowledge our classes put forward several name ideas ideas including...

> Gold Fly – Jax Blue Spotted Fly – Dane Crystal KICE Fly – Makenzie Rainbow Abdomen Fly –whole class idea Teal Thorax Fly – whole class



#### **Importance of Our Research**

The information from our research is important so we can understand the biodiversity on Kangaroo Island. This is particularly important here because we had bad bushfires in 2020. By documenting and describing the insects found on the Island in different seasons we can understand how the natural environment is recovering.

'I think this could be useful because we could discover more new species of fly' – Alyssia 'Scientists can learn more so then we can learn more about insects' – Lex 'It might be useful for knowing what type of insects are on KI' - Connor

#### What's Next

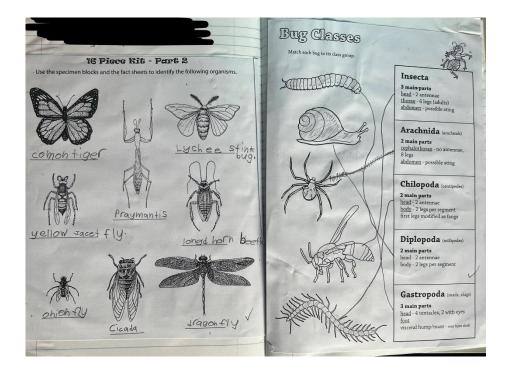
Based on our observations we have decided that to compare our results accurately we will need to repeat our research in the summer months. We have decided that our next insect collection data will mainly be used to compare winter insects and summer insects found at our school site.

#### Acknowledgements

Special thanks to Dr Rachel Pillar and the Year 7 and 8 Insect Investigator teams for sharing their skills and research results with us.

#### Appendix A – student work sample

This is a complete sample of student bookwork that went along with this research. This was completed alongside several class tasks and hand on learning opportunities for students.





I notice that we had so meny worms.

2. I was surpried because there was bely eny bees.

30 I think we need

bugs because it is inportent to Know wether they have all name or not.



I learned that the flies# bugs are going to be sent to canda and last year they cort diffrant things.

bug name blue butt flie malaise trap

