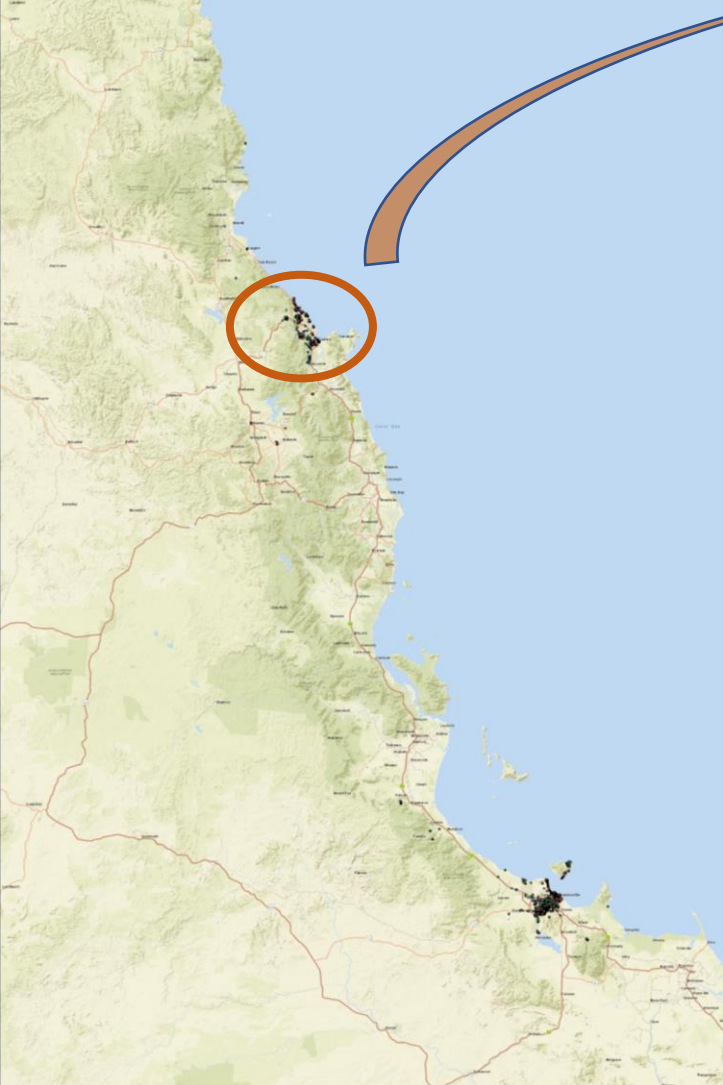


# Is greener cleaner? Recording litter across Yorkeys Knob

Alternate title:

*How I learnt to stop worrying and love ArcGIS.*

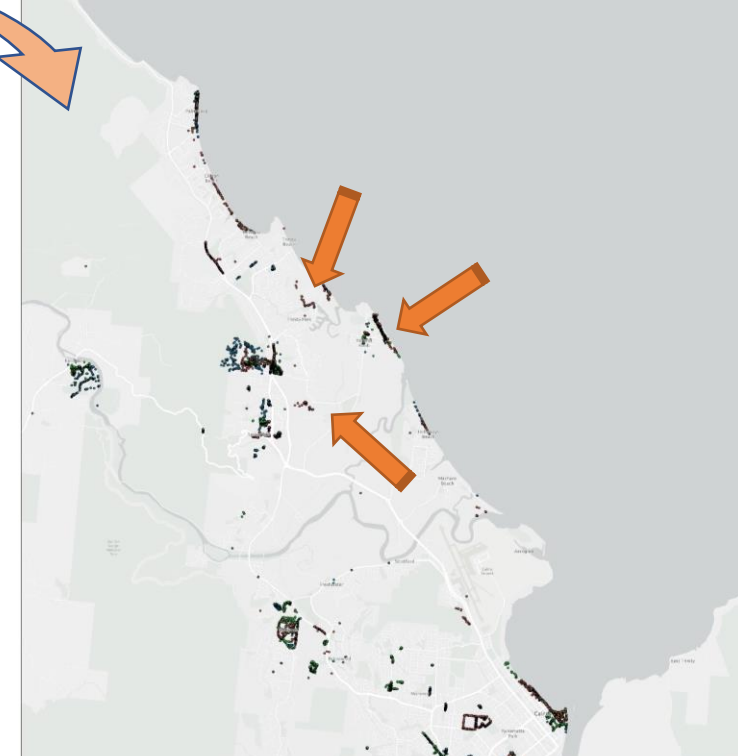
# Data collection – using epicollect5



Data needed to be:

- Representative of a local area
- Sampled across multiple years
- Cover both 'green' and 'brown' sites.

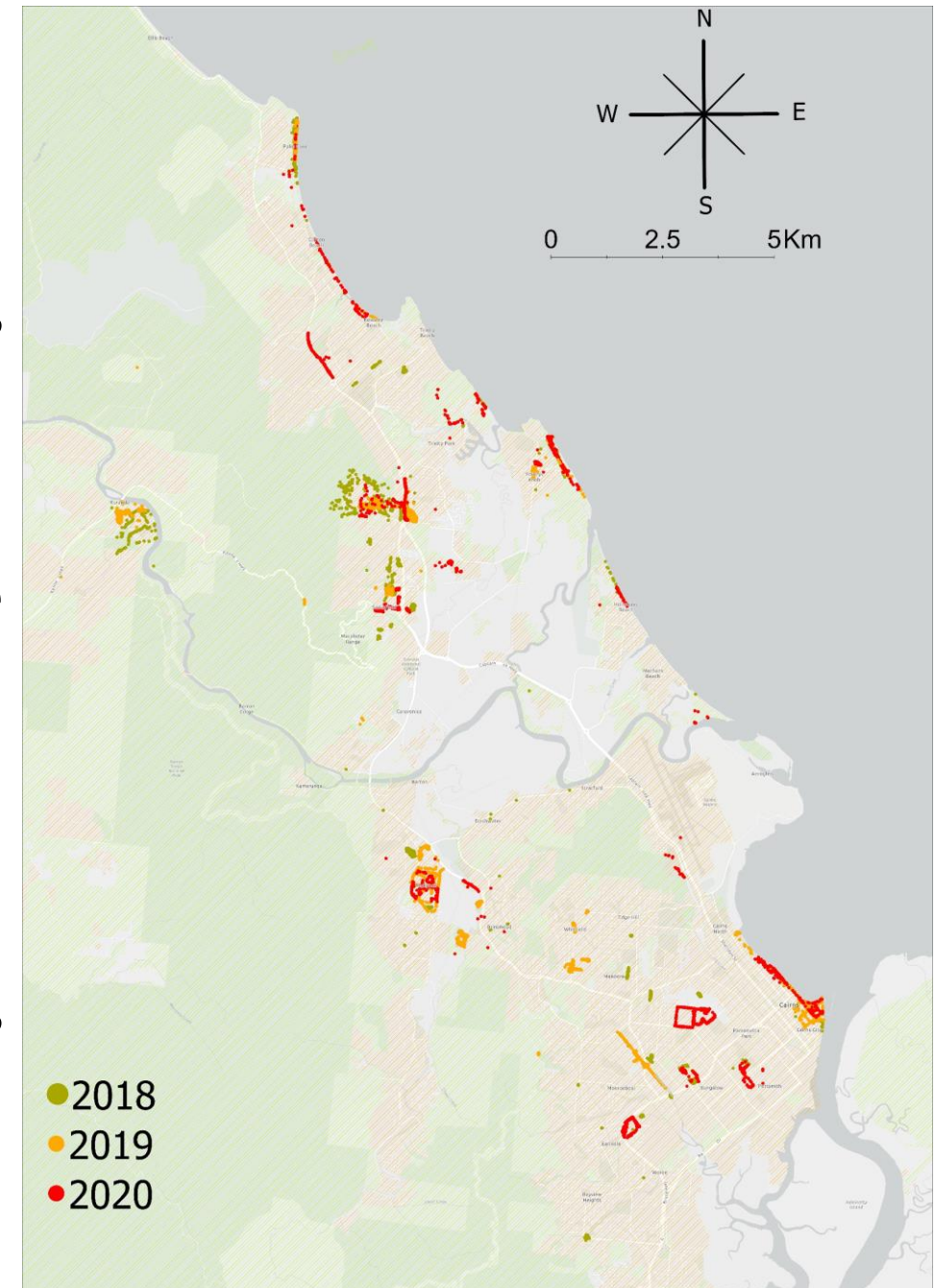
2020 was quite a unique year for data collection!



We sampled within  
**Cattana** wetlands, **Earl Hill**, and **Yorkey's Knob**  
beachfront

# Developing the question

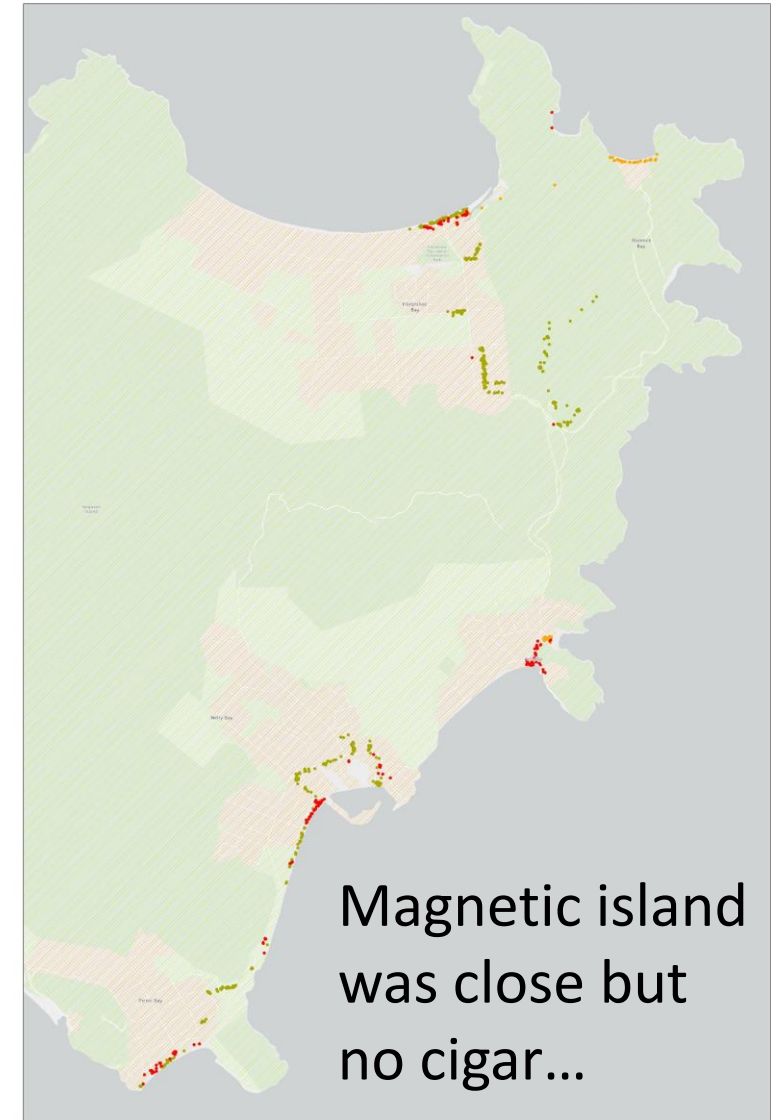
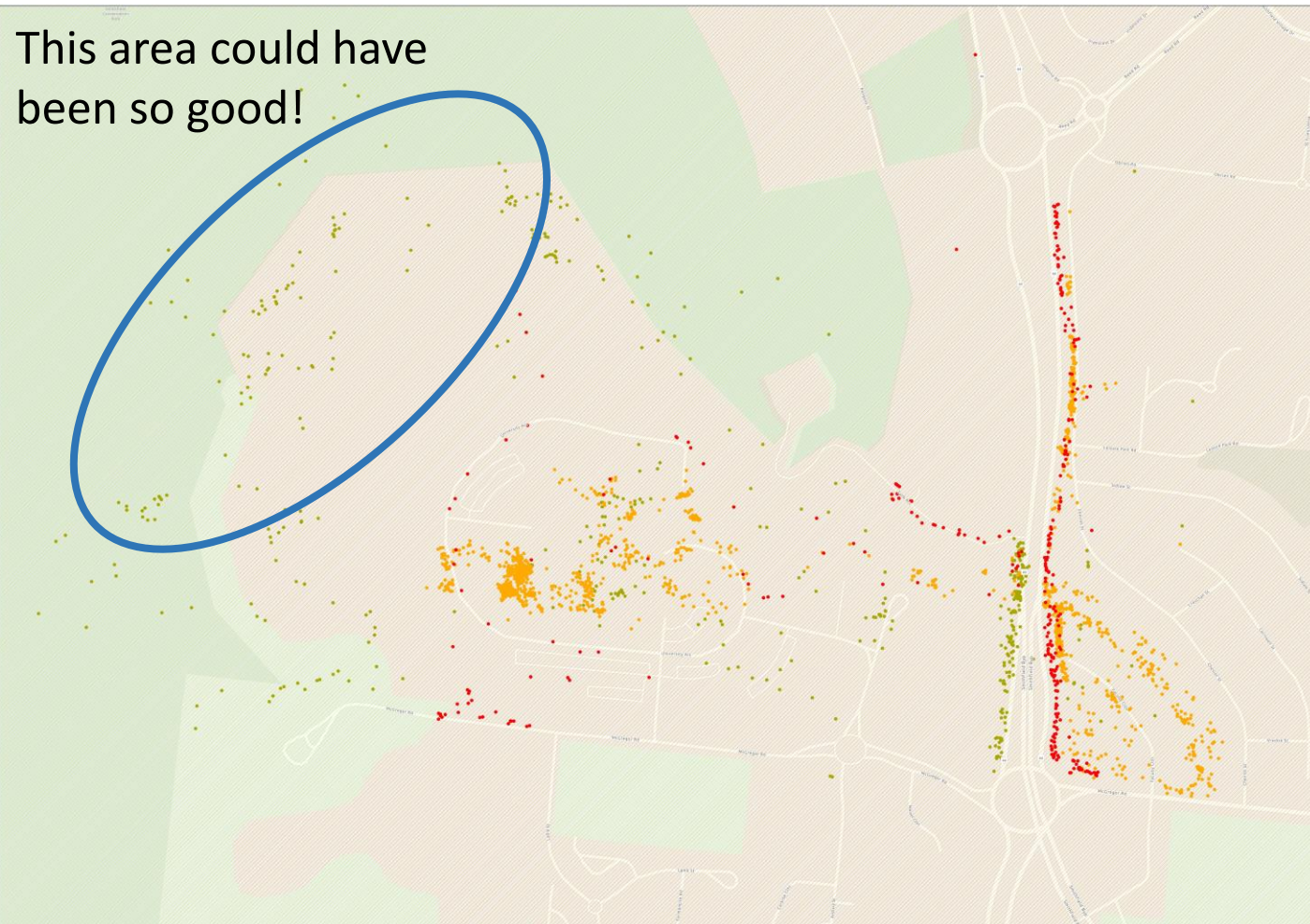
- Interested in measuring litter across 'green' and 'brown' sites.
- Needed sampled sites that straddle the green / brown boundary.
- Qspatial land use polygons defined 'green' and 'brown' sites





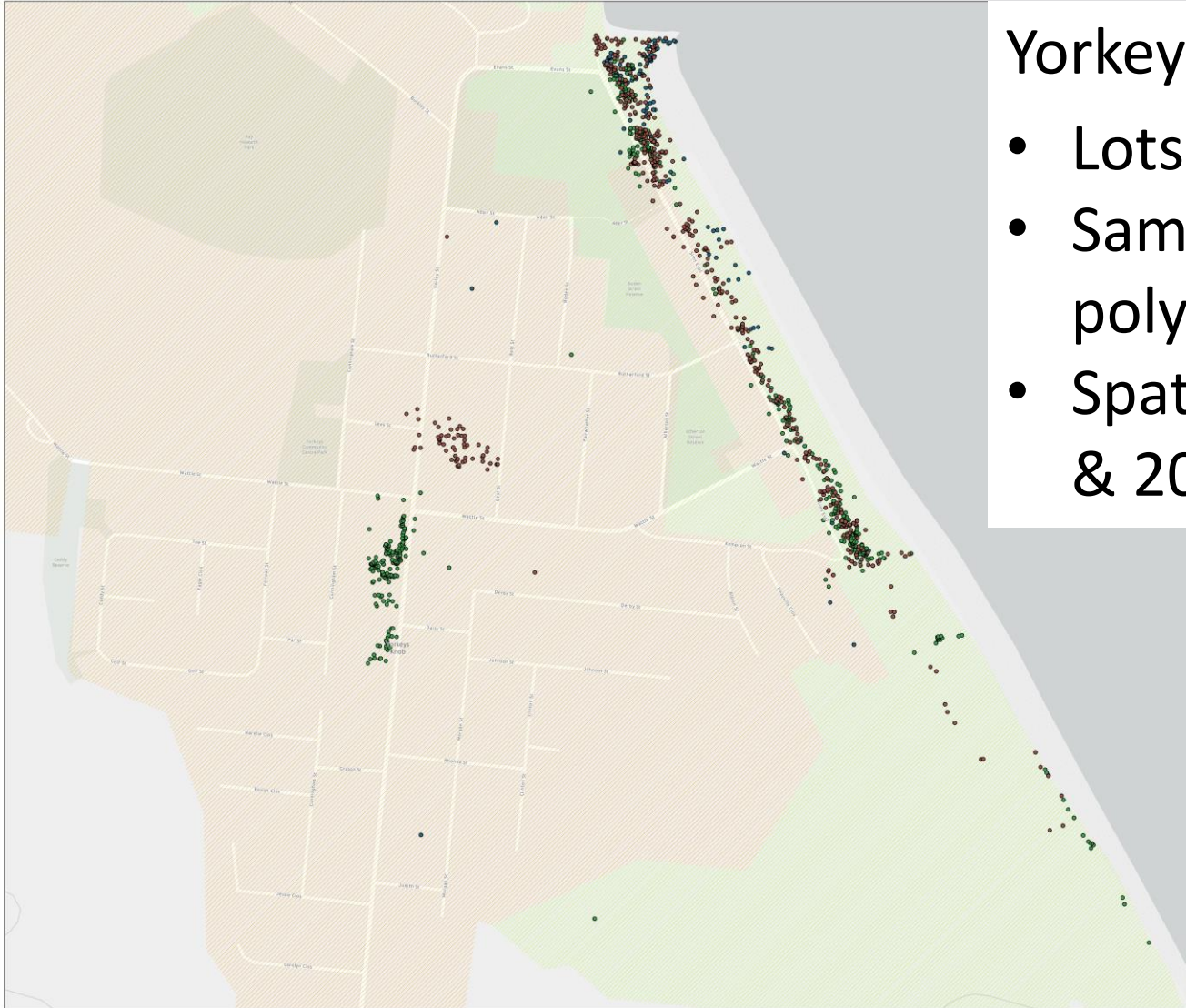
# Developing the question – which site?

Limited to sites with 'green' & 'brown' data across **multiple years**.





# Developing the question – which site?



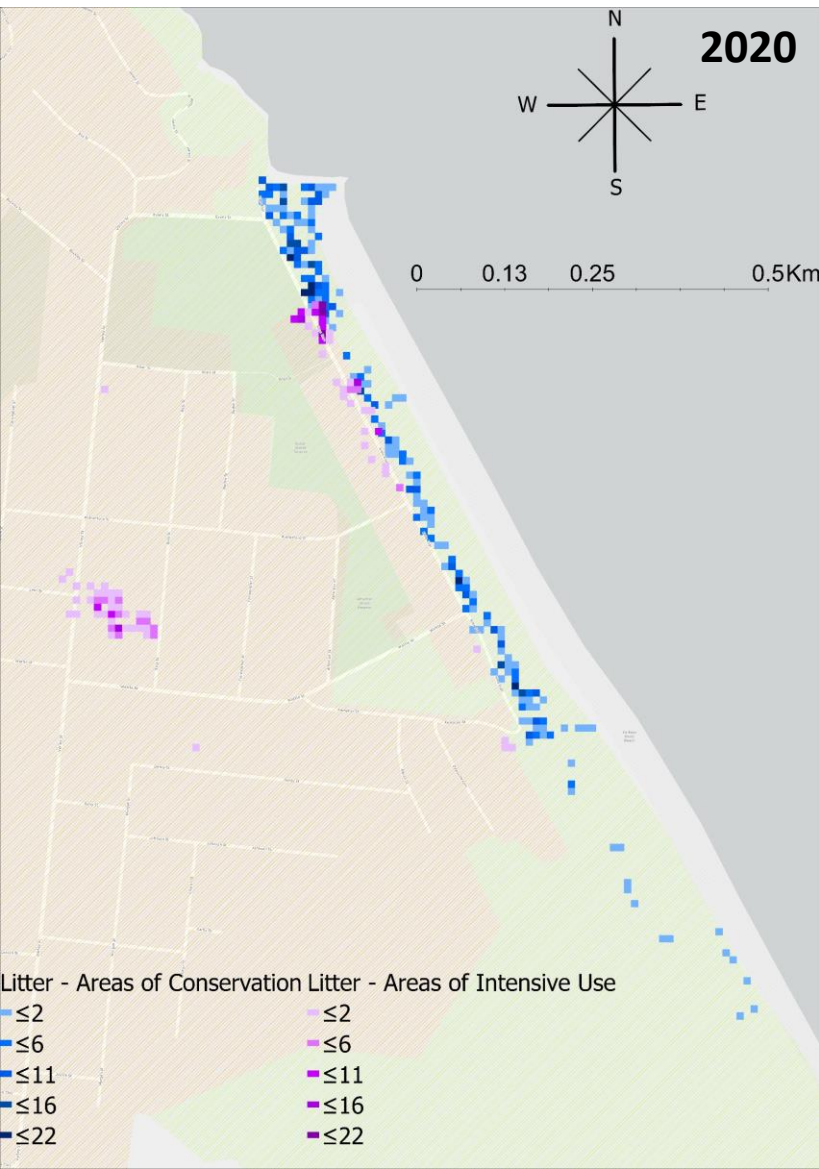
Yorkeys Knob ticked all the boxes:

- Lots of data!
- Samples taken across different land use polygons.
- Spatially comparable datasets from 2020 & 2019.

Finalised question:

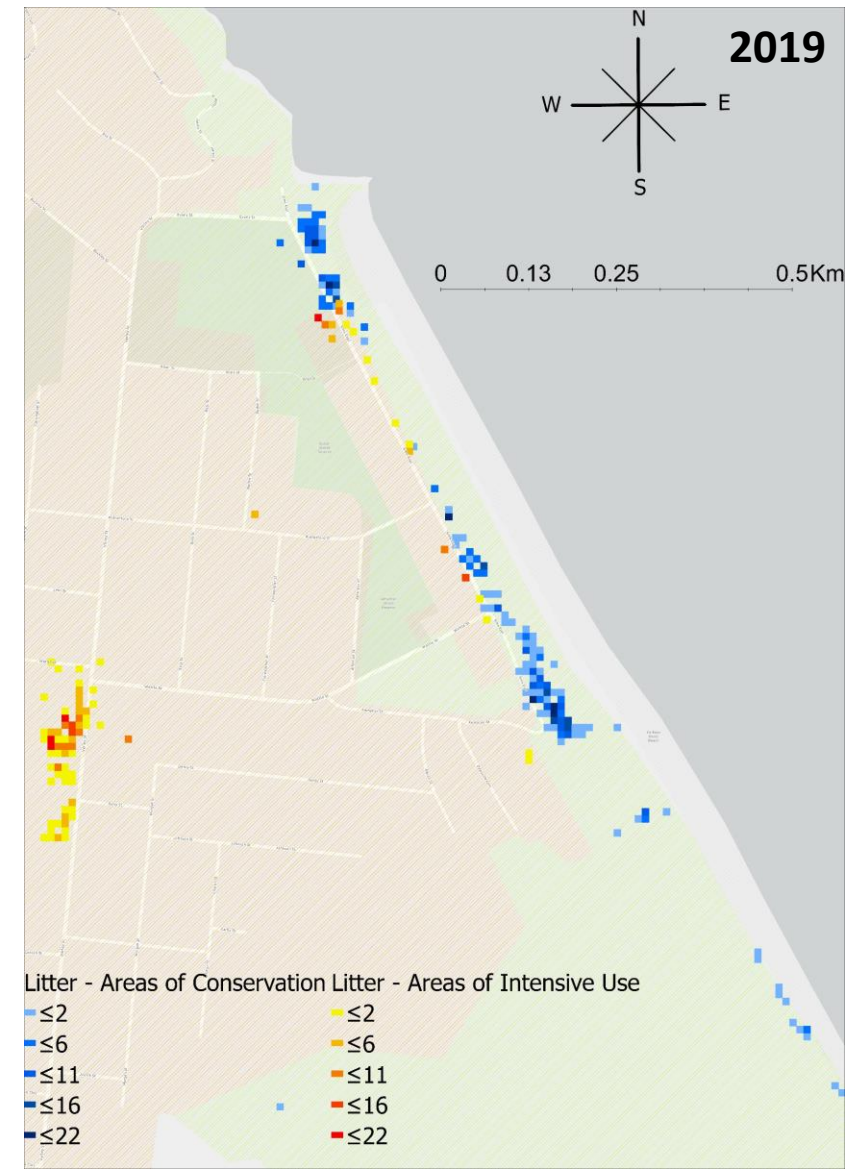
“Do conservation areas have different litter profiles? – *Litter assemblages in Yorkeys Knob, 2019 and 2020*”

# Data analysis – Keep It Simple Silly

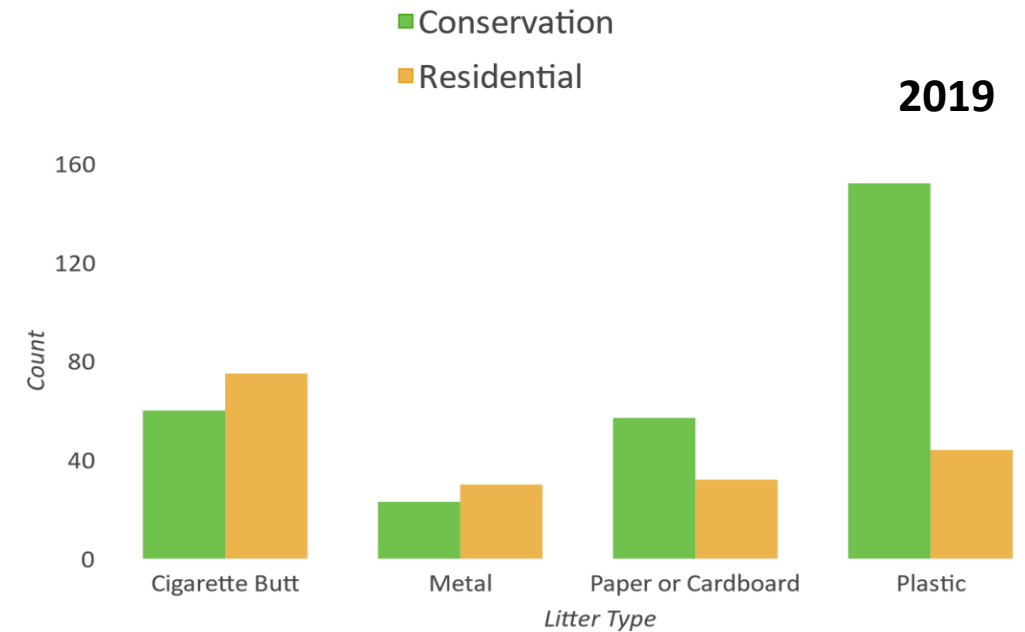
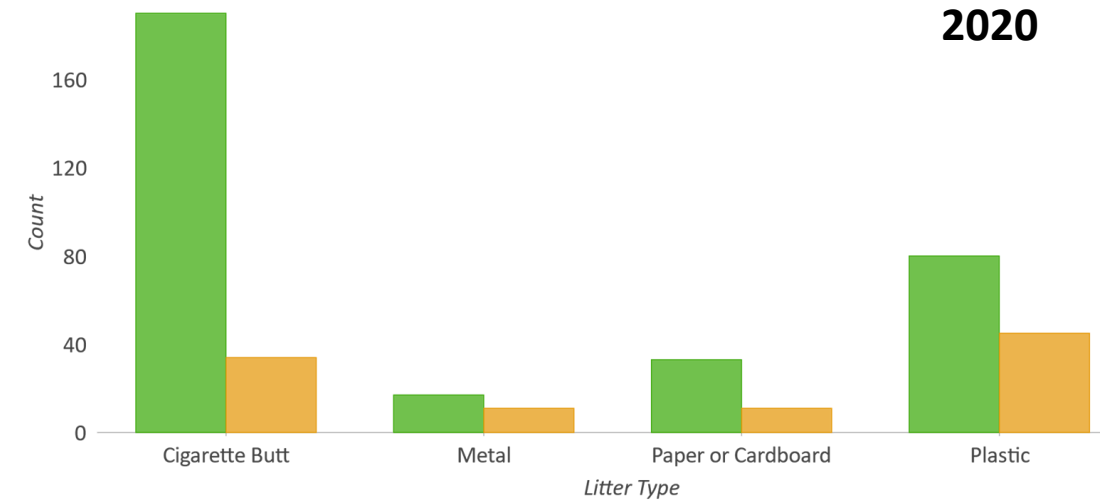
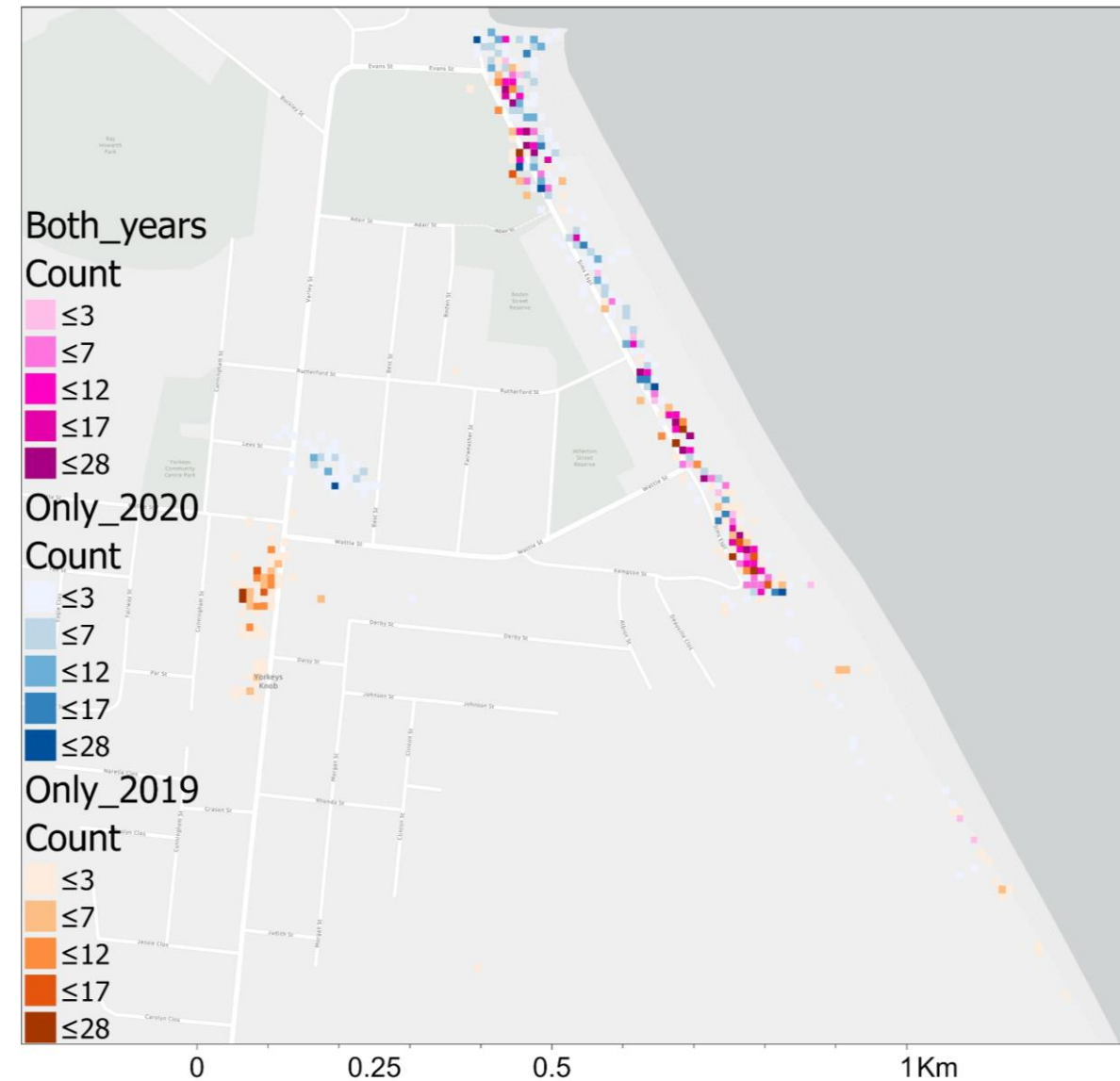


- Cleaned litter data of inaccurate records, and non-litter entries
- Created a 10m **fishnet** for Yorkeys and **spatially joined** records to it.

Question for the audience:  
How would you have analysed the litter data?  
Which tests / models would you have used?

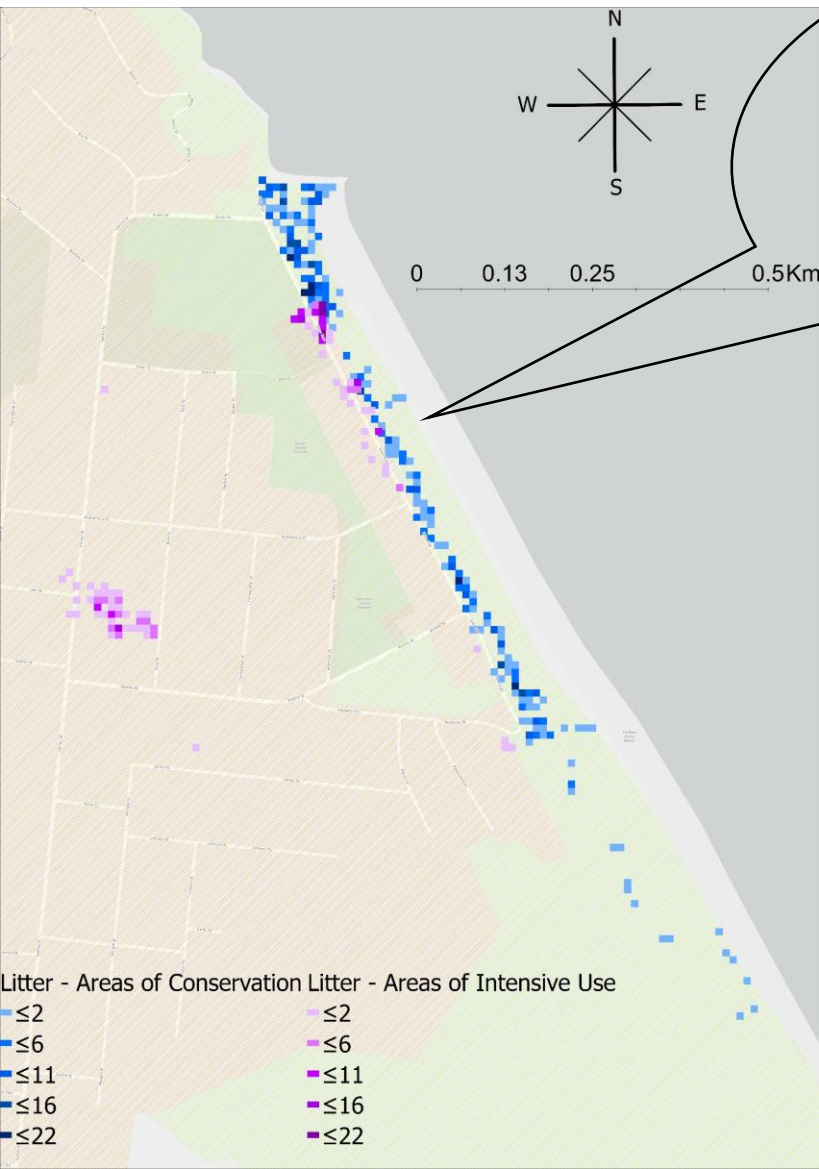


# Data analysis – Too simple?



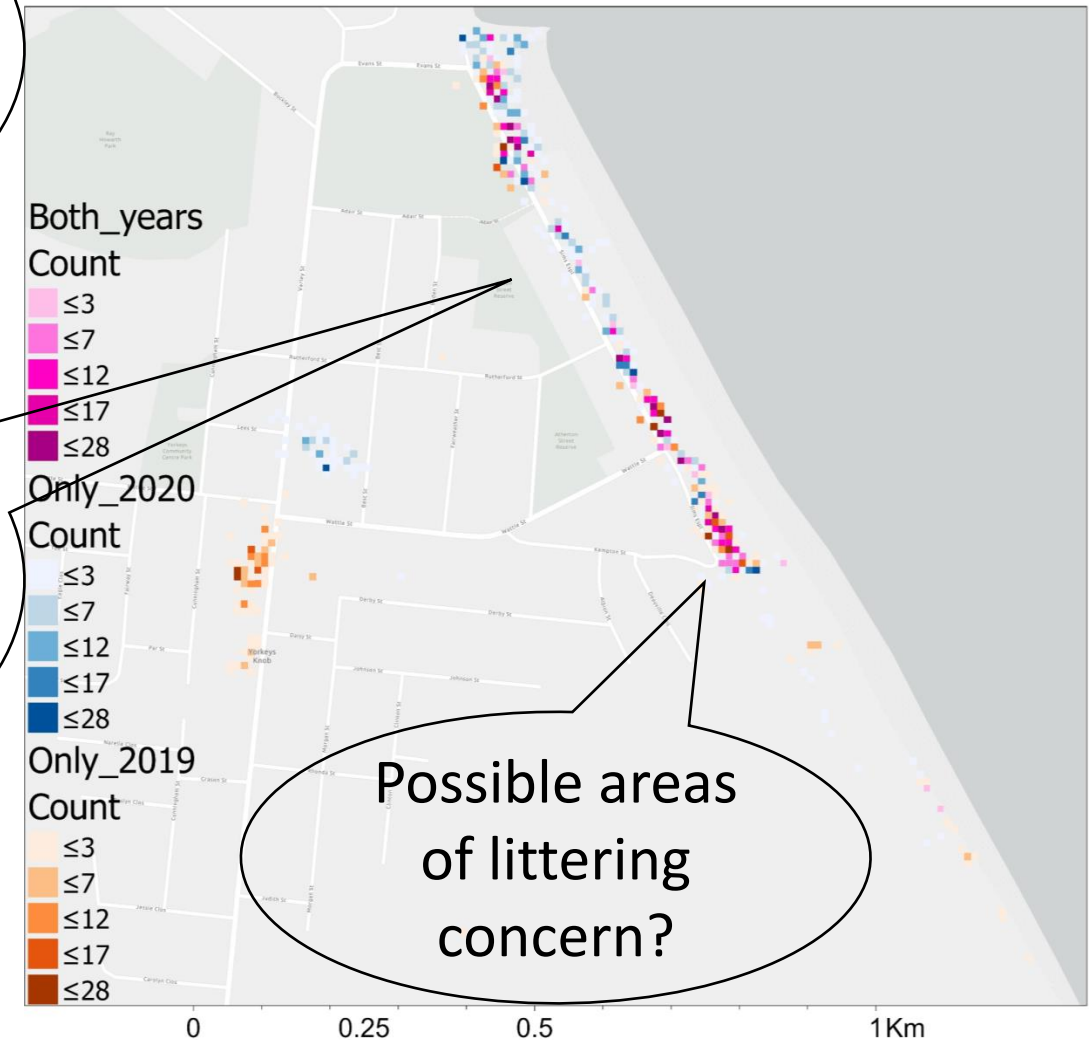


# Data interpretation – what story can we tell?



More sampling along conservation sites, or more litter in general?

Litter data seems more spread out along the beach in 2020

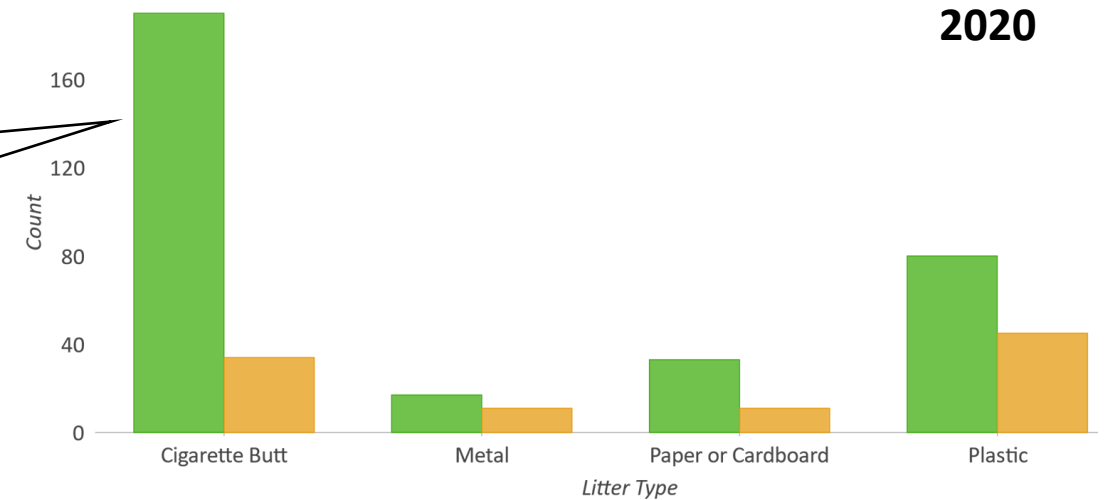


Possible areas of littering concern?



# Data interpretation – what story can we tell?

Specific sampling locations may impact the type of litter recorded.



## Question for the audience:

Would future student data collection benefit from becoming more standardised?

e.g. at least 5 hours must be spent sampling at one of a specific list of sites.

