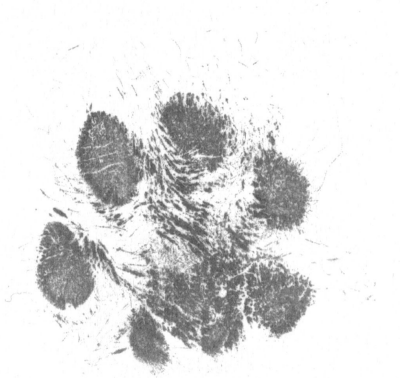
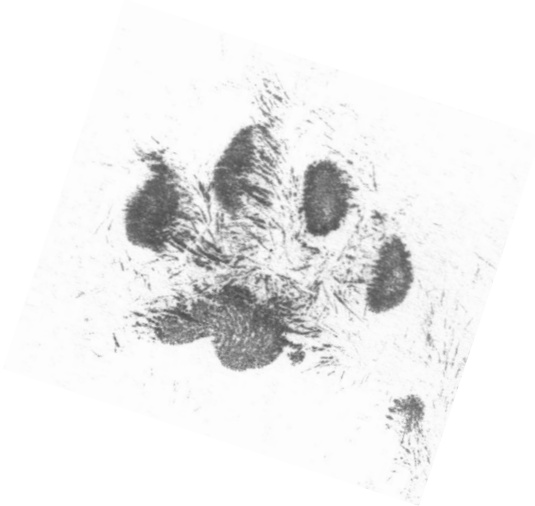


Cat Paw Print Experiment



INTRODUCTION

Background Information:

I have three pet cats - Nori, Nala and Taco. I love my cats, but sometimes they get up to mischief. Even though they are indoor cats, they could get lost.

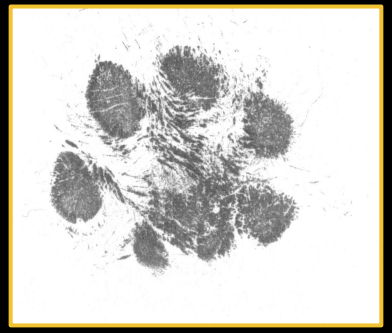
Finding out if they have unique paw prints might help me know who is in trouble or to find a lost cat's owner.

INTRODUCTION

Purpose/ Rationale:

I wanted to know, “Do cats have unique paw prints?” I am interested in this question because cats are in it.

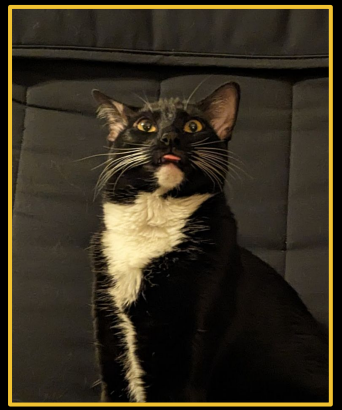
RESEARCH QUESTION



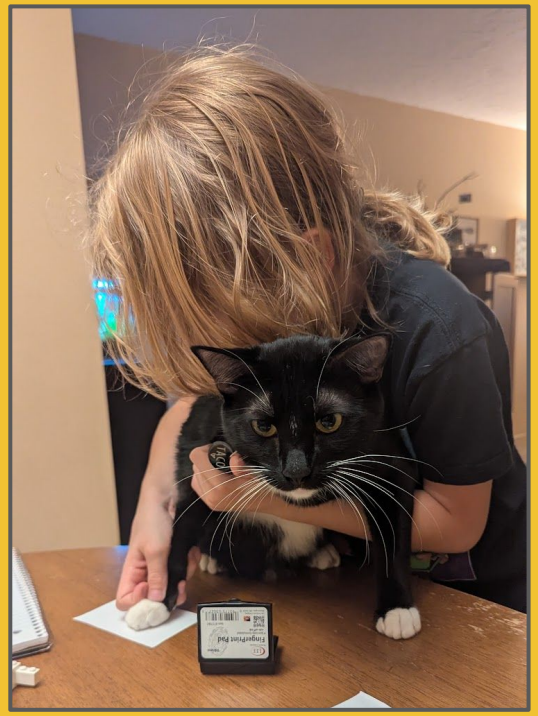
Do cats have unique paw prints?

PREDICTION

If a cat's paw print is unique, then we can identify a cat by its paw print more accurately than random chance.



MATERIALS



1) Cats*
2) Ink pad
3) Paper/cardboard
4) Pen
5) Camera and scanner
6) Printer
7) Human test subjects

* No cats were harmed in this experiment, though some might have been annoyed.

PROCEDURE

1) Get cats
2) Use ink pad to record paw prints
3) Test different people on recognizing paw prints
4) Record scores
5) Share results

LIMITATIONS

Some cats couldn’t be used:

Fluffy Cats

Nala

Nala’s toe floof

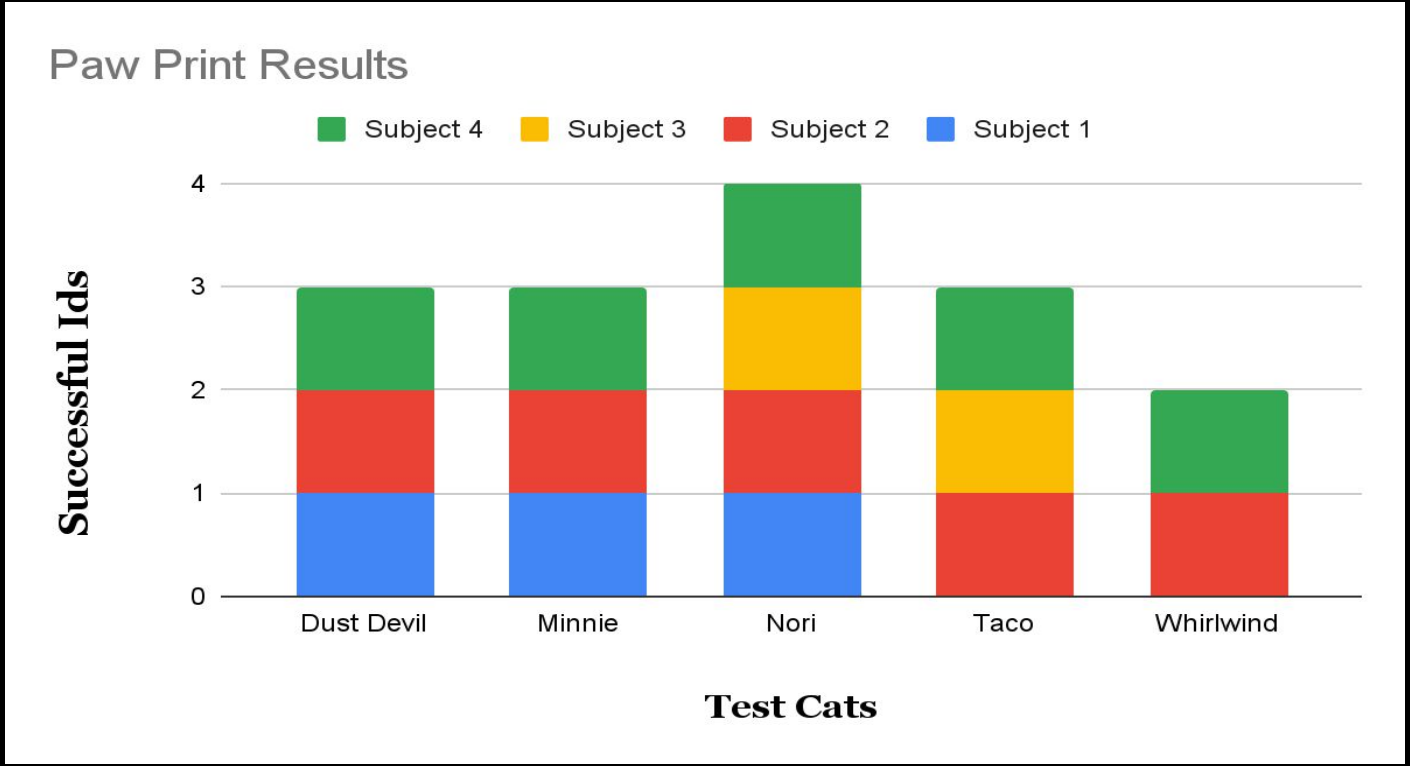
Unusable print

LIMITATIONS

Some cats couldn’t be used:

Some cats just weren’t into it.

DATA / RESULTS



DATA / RESULTS

Cat	Code	Subject 1	Subject 2	Subject 3	Subject 4	Total	
Dust Devil	9nyi	1	1	0	1	**3**	75.00%
Minnie	g3ek	1	1	0	1	**3**	75.00%
Nori	mxd3	1	1	1	1	**4**	100.00%
Taco	m7cg	0	1	1	1	**3**	75.00%
Whirlwind	ka6z	0	1	0	1	**2**	50.00%
	Total	**3**	**5**	**2**	**5**	**15**	75.00%
		60.00%	100.00%	40.00%	100.00%	75.00%	

DISCUSSION

The evidence says that cats do actually have unique paw prints. If the hypothesis was incorrect, then there would be a 20% chance to correctly identify a paw print. Instead, we got an average of **75% correct.**

DISCUSSION

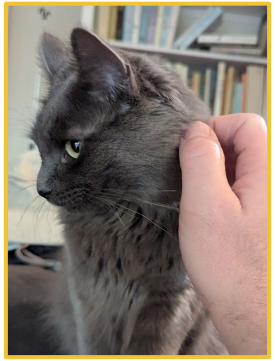
My challenges were:

- It is hard to get good paw prints with the fingerprint pad
- Some cats have too much toe fluff
- Some cats are too scratchy

IMPLICATIONS

This project is important because it could help us answer questions like “Who ate the fish?” and “Is this the paw print of the lost cat?”

SPECIAL THANKS TO:

Minnie, Whirlwind, Dust Devil, Nori, and Taco.

Also Nala, Iolo, and Satchel for trying.