



Landcare Research
Manaaki Whenua

CHEW-TRACK-CARDS

A guide to the interpretation of animal tooth impressions

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Contracted by the Animal Health Board and FRST



Why do we Need a New Pest Detection Device?

- Most current methods are inefficient at mapping dist. of very low density pest.
- Efficient mapping will permit cheap targeted control or even local elimination of low-density pests.
- Possible improvements to current interference devices (e.g. WaxTag®).

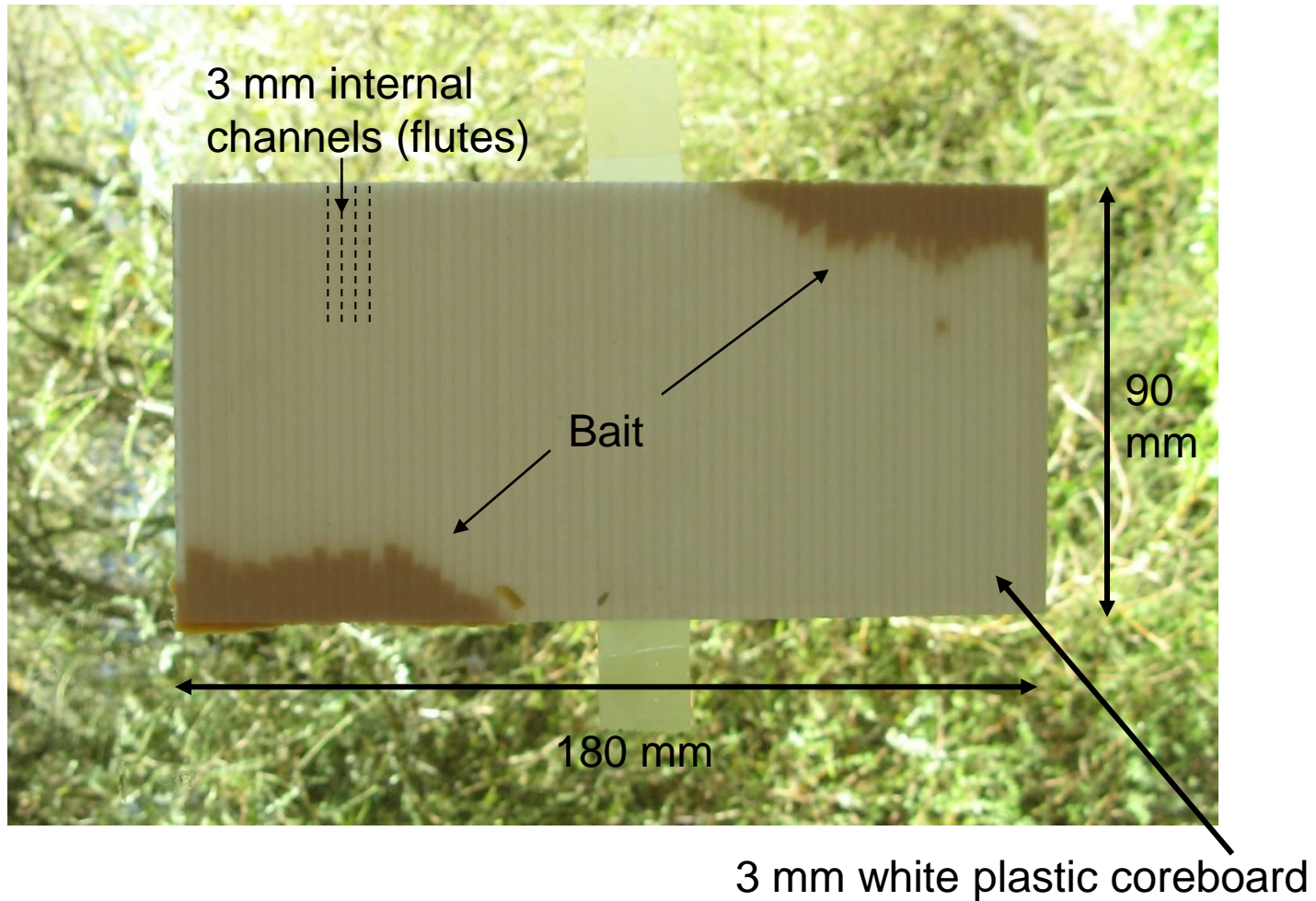
WaxTag®



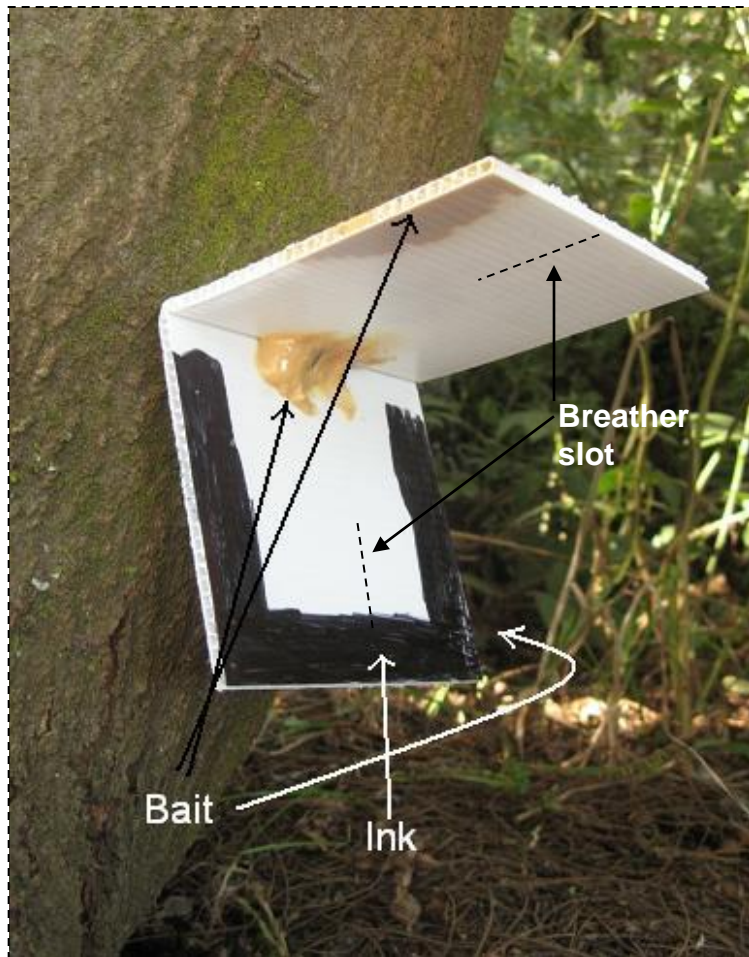
Features:

- Light, easy to deploy
- Unlured wax block (peanut butter flavoured wax now available)
- Limited detection surface for multiple pest detection
- Added bait exposed to weather

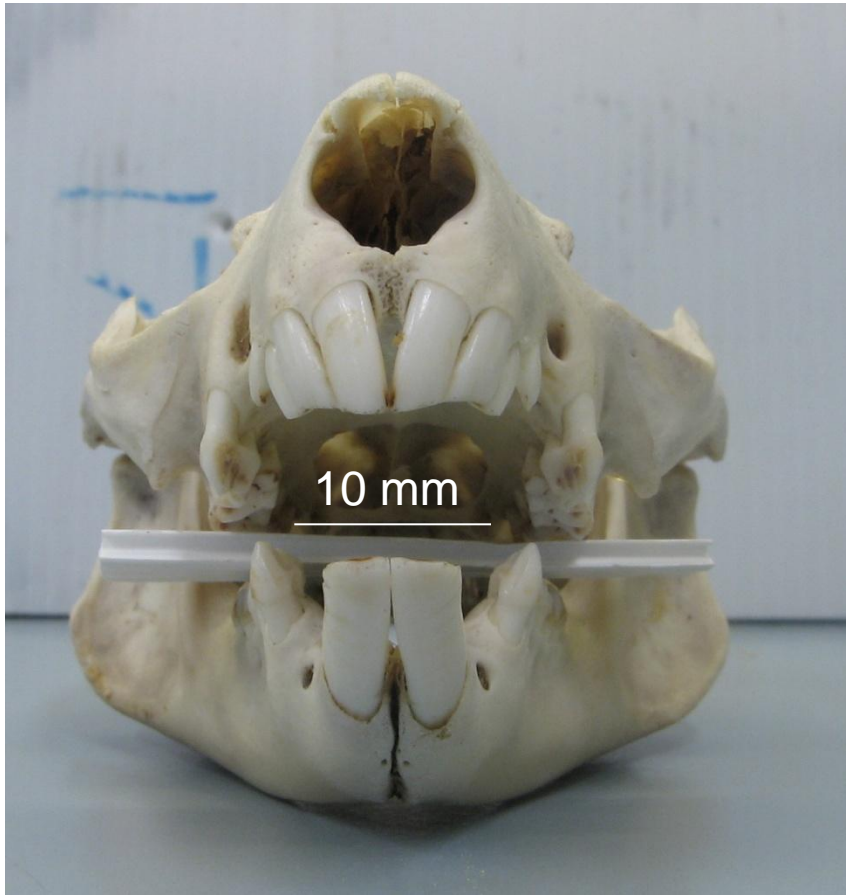
Chew-Card Design



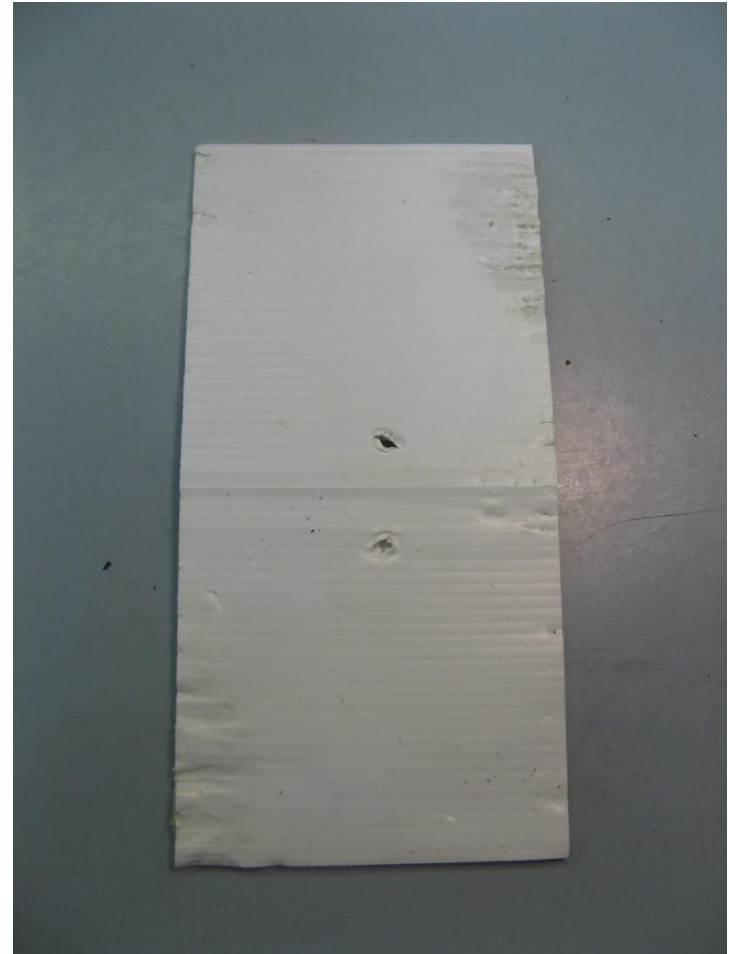
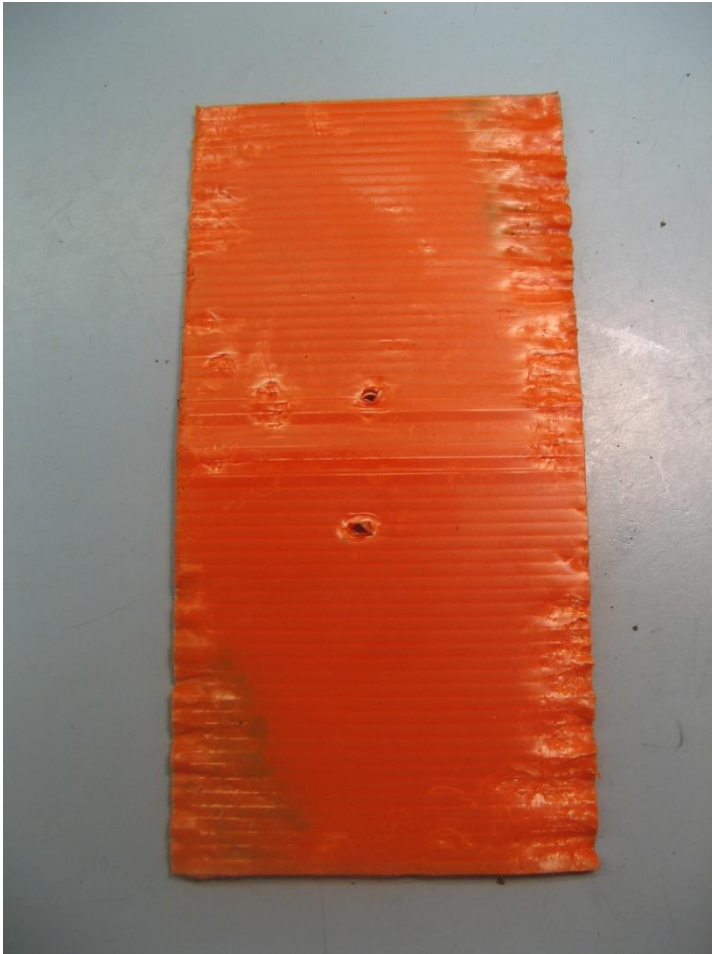
Chew-Card sets



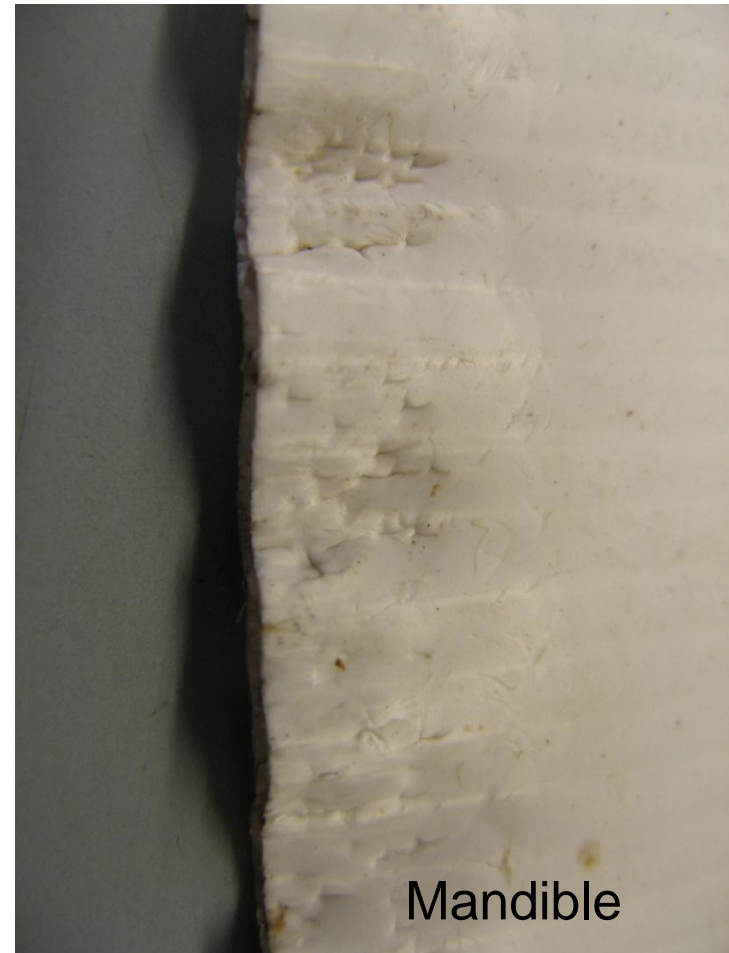
Possum Teeth



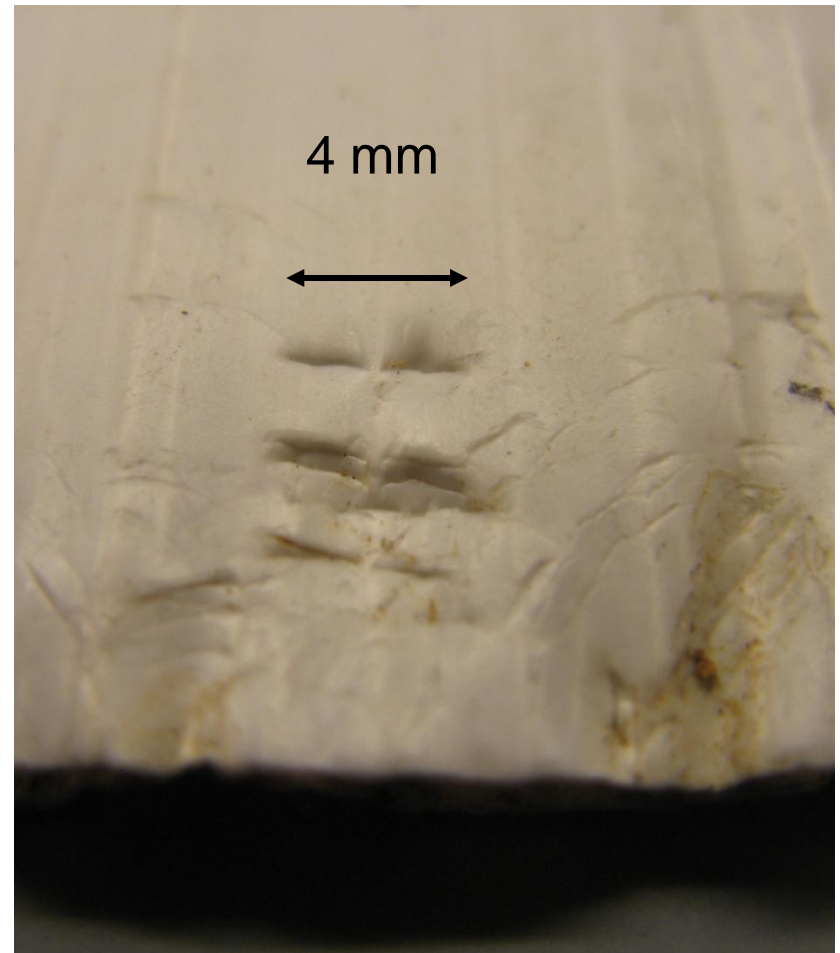
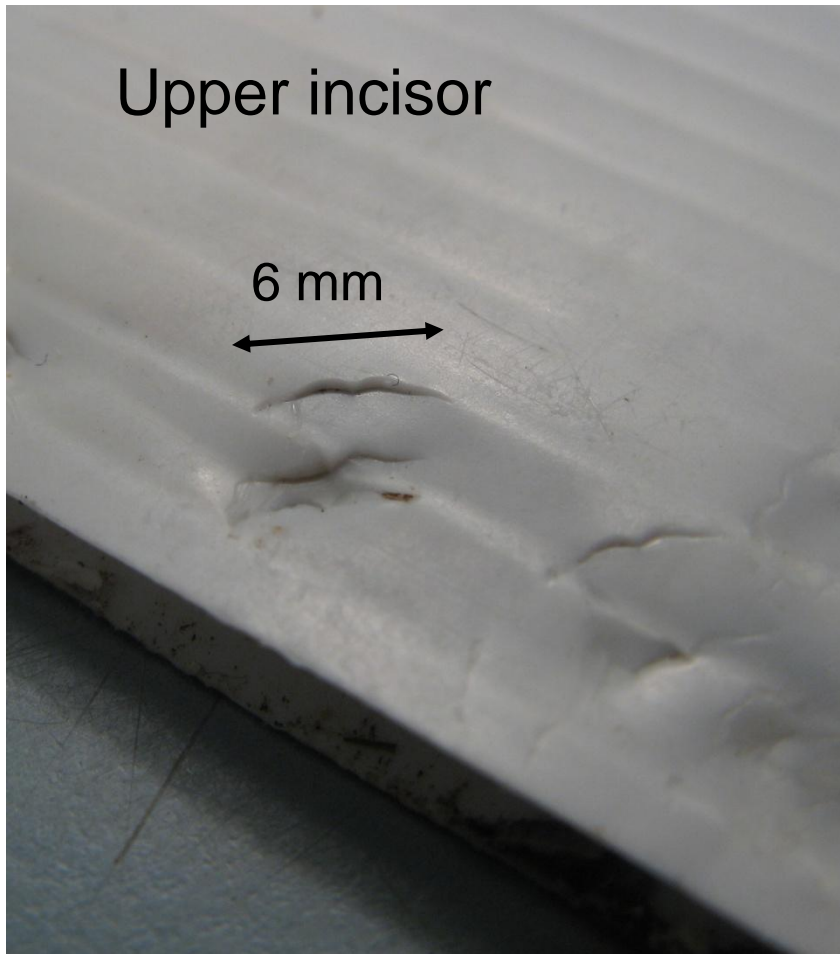
Possum Tooth Impressions



Possums: crushed card margins



Possums: tooth impressions



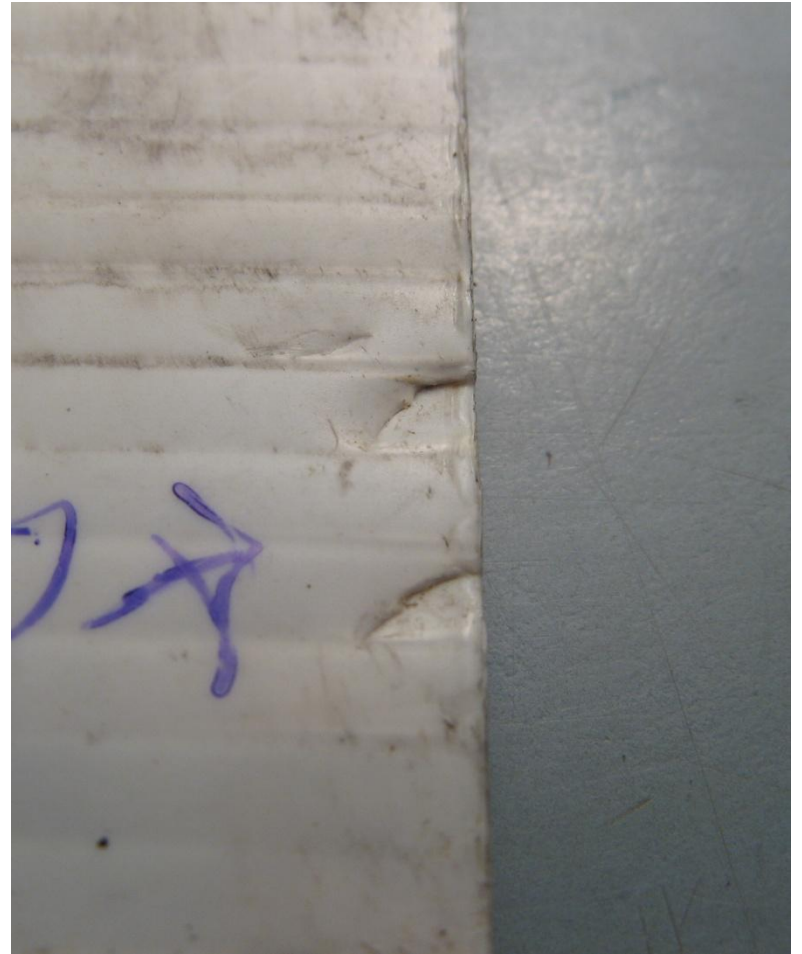
Possums: light marginal chewing



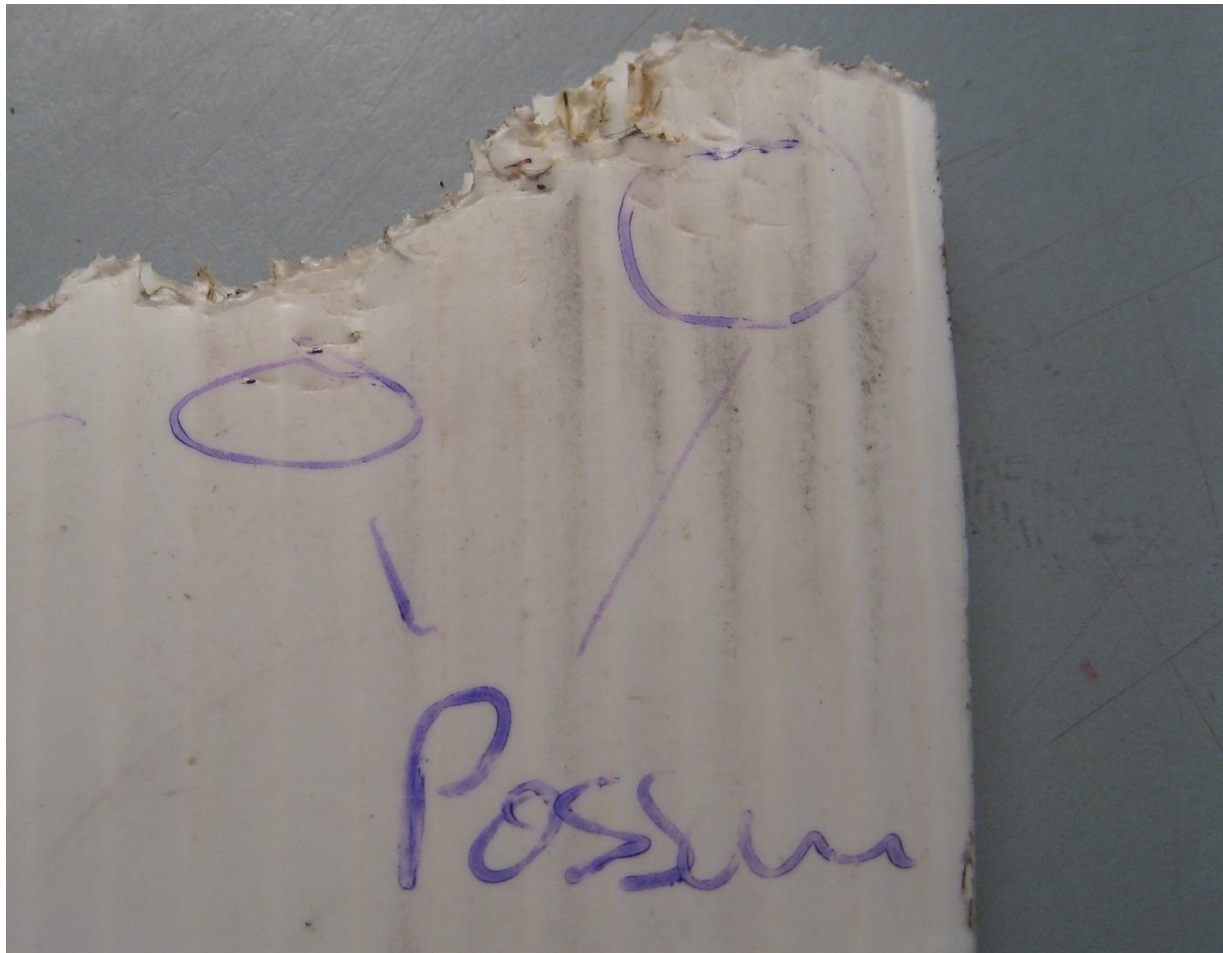
Possums: light biting



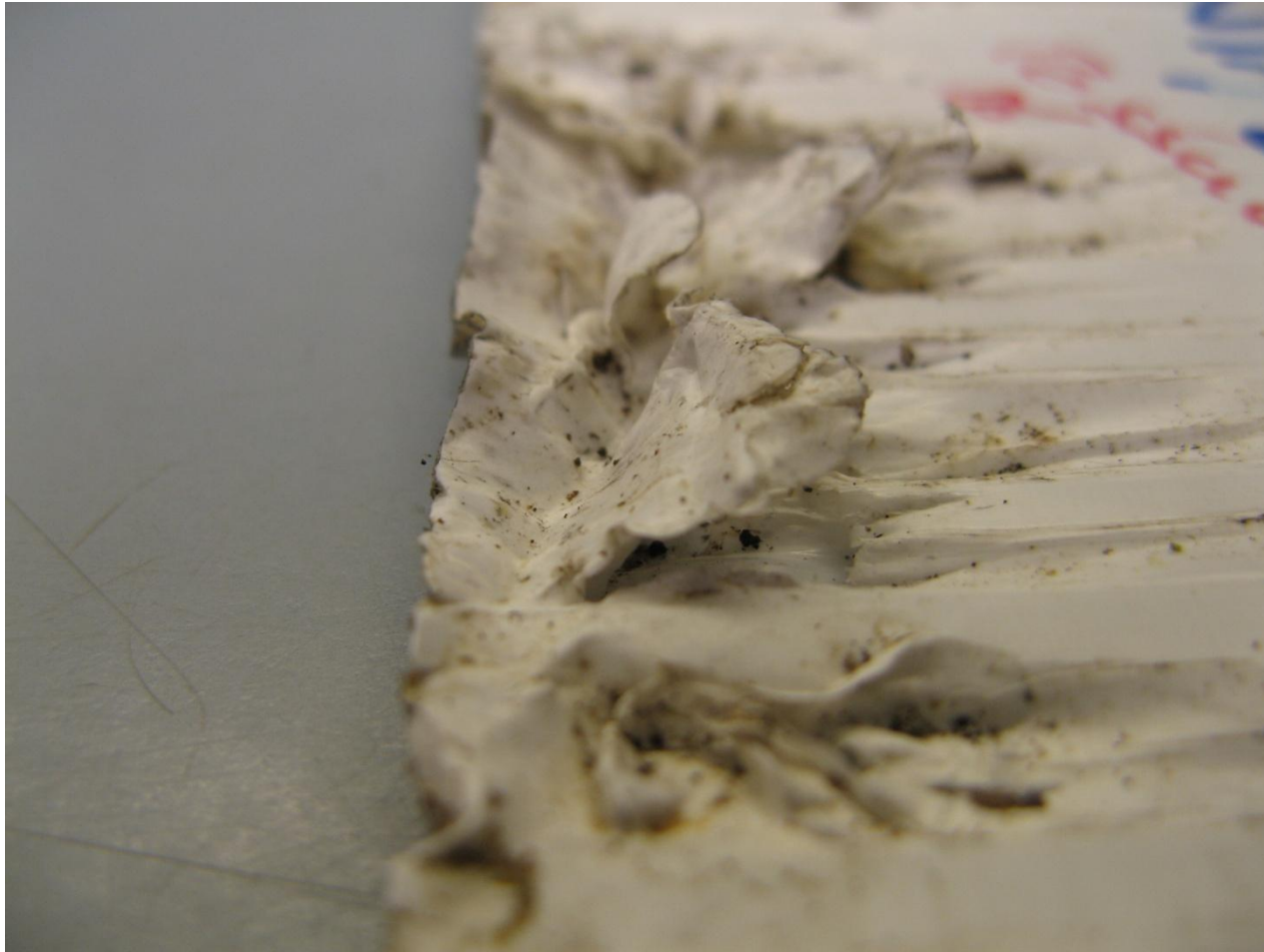
Possums: light biting



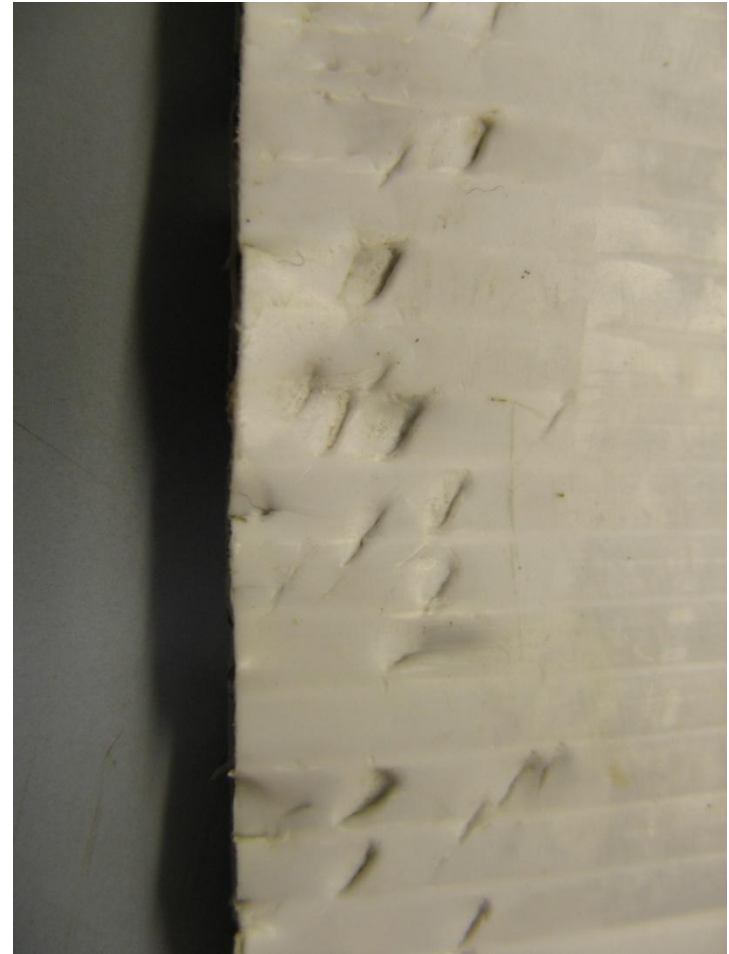
Possum and Rat Bites



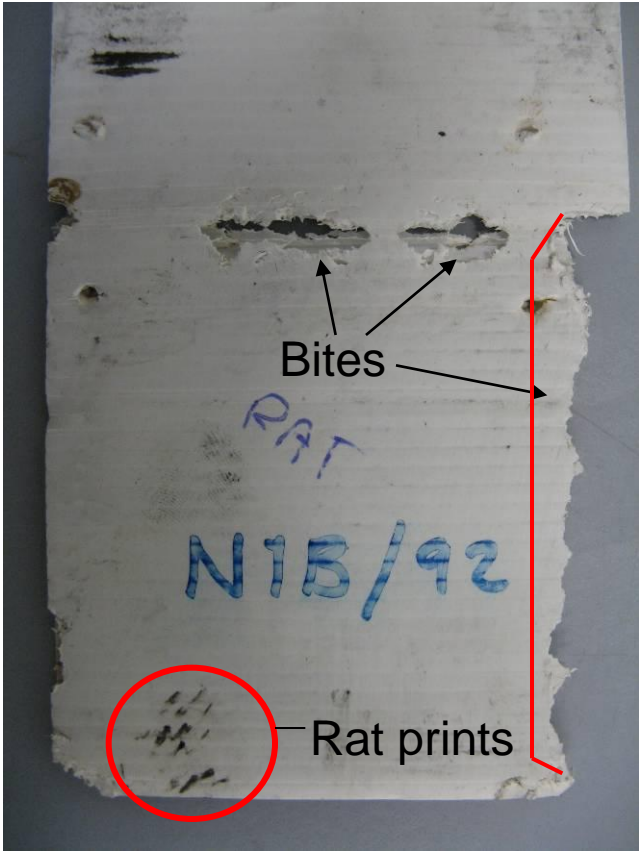
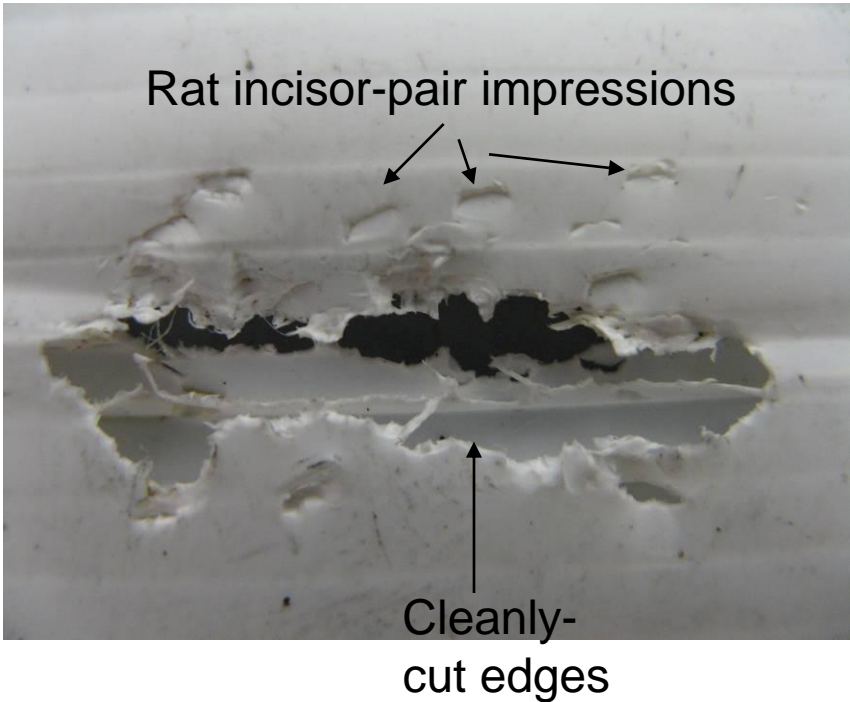
Possum: heavy chewing



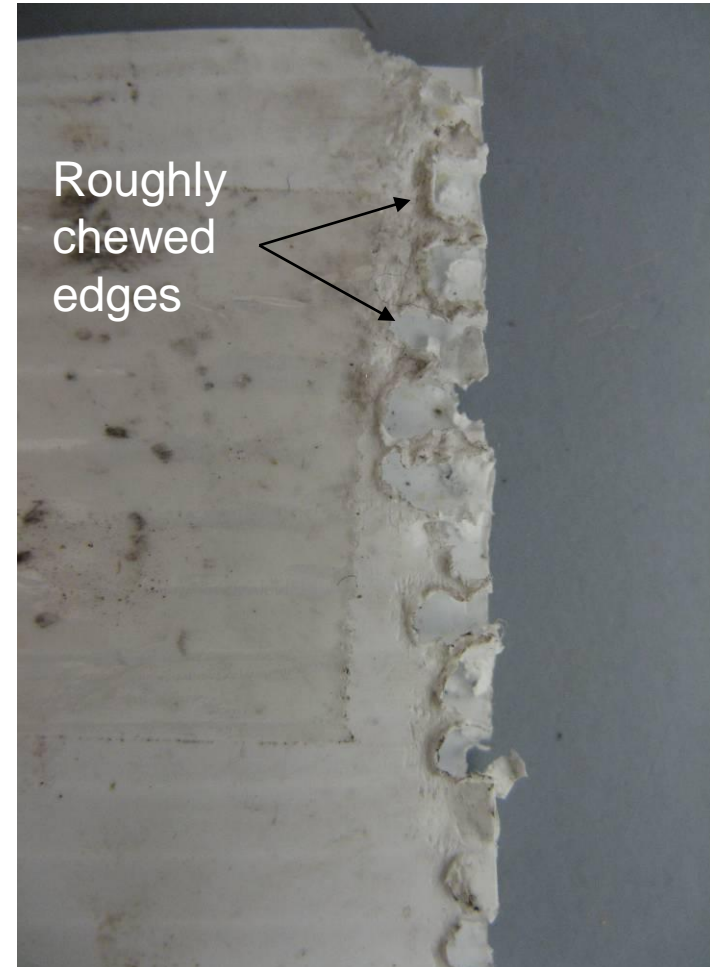
Possum: angled chewing



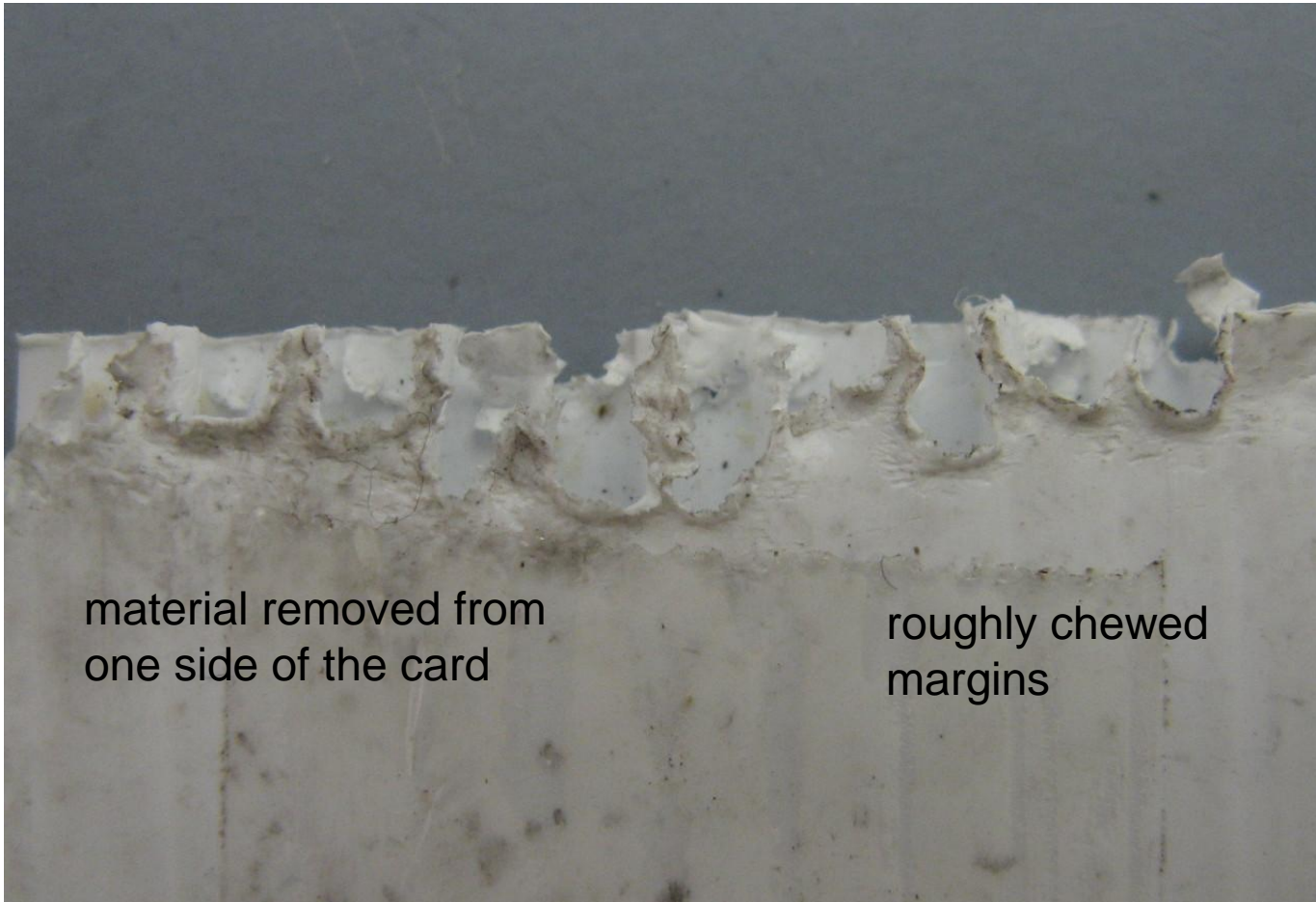
Rats



Mice



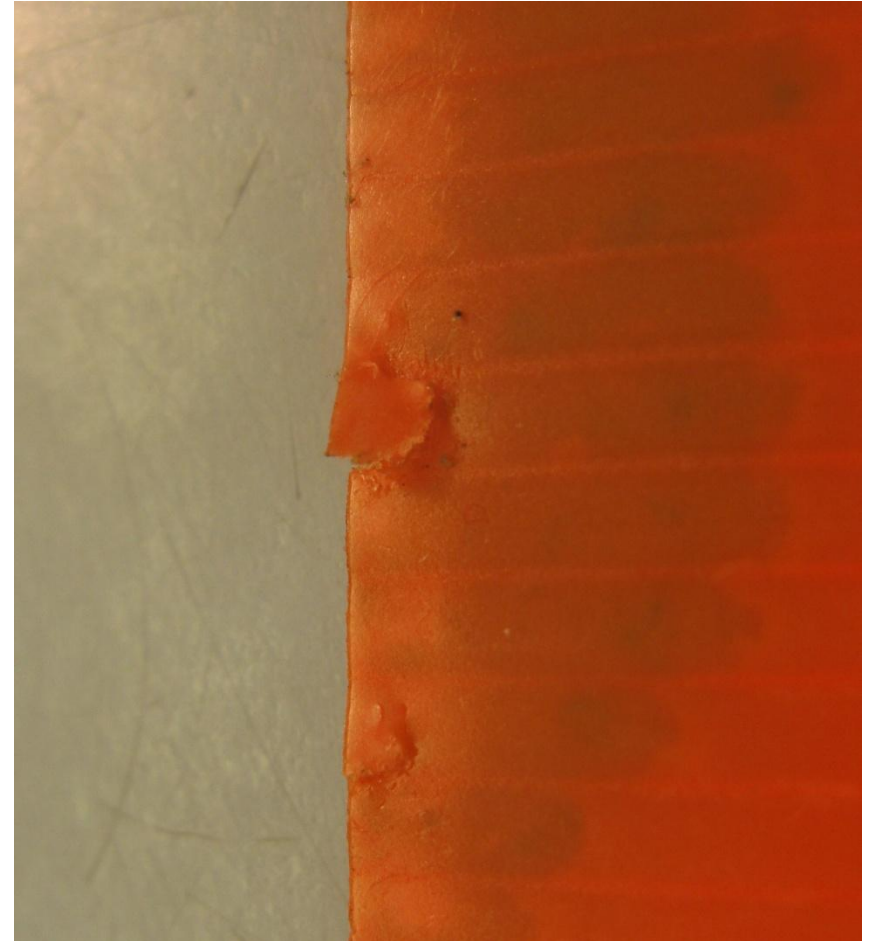
Mouse



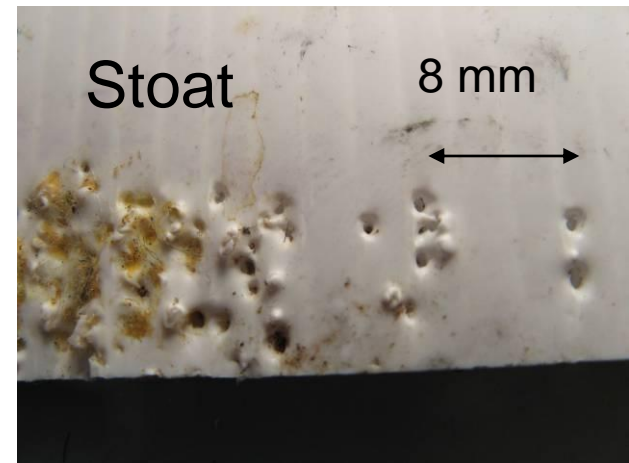
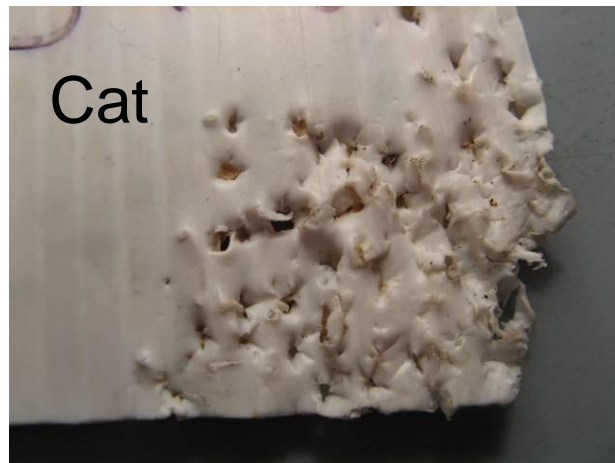
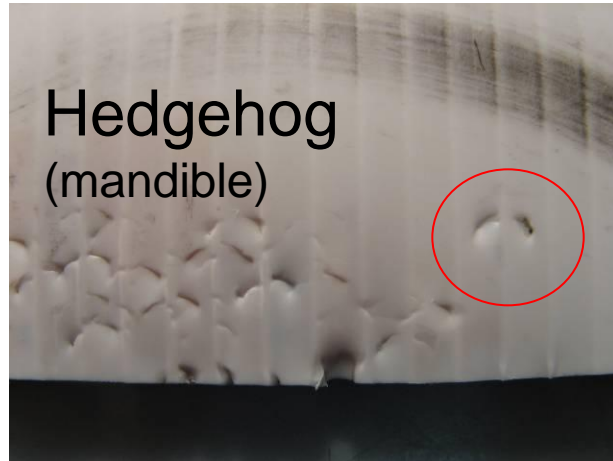
material removed from
one side of the card

roughly chewed
margins

Mouse Nibbles



Carnivores



Carnivores produce circular puncture marks made by canine teeth but hedgehogs also make blunt mandible (lower jaw) incisor impressions.

Rabbit



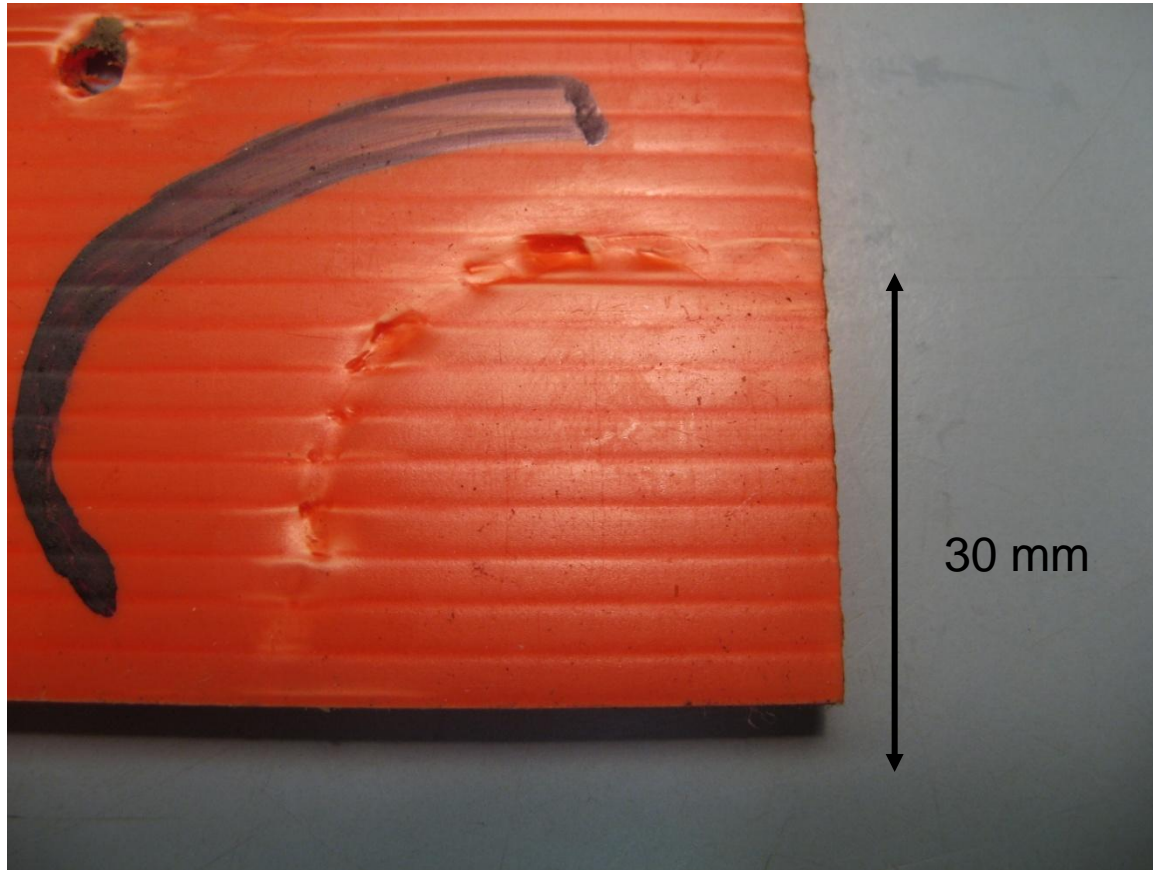
Large areas cut from card surrounded a crushed margin with numerous distinct broad incisor tooth impressions.

Rabbit



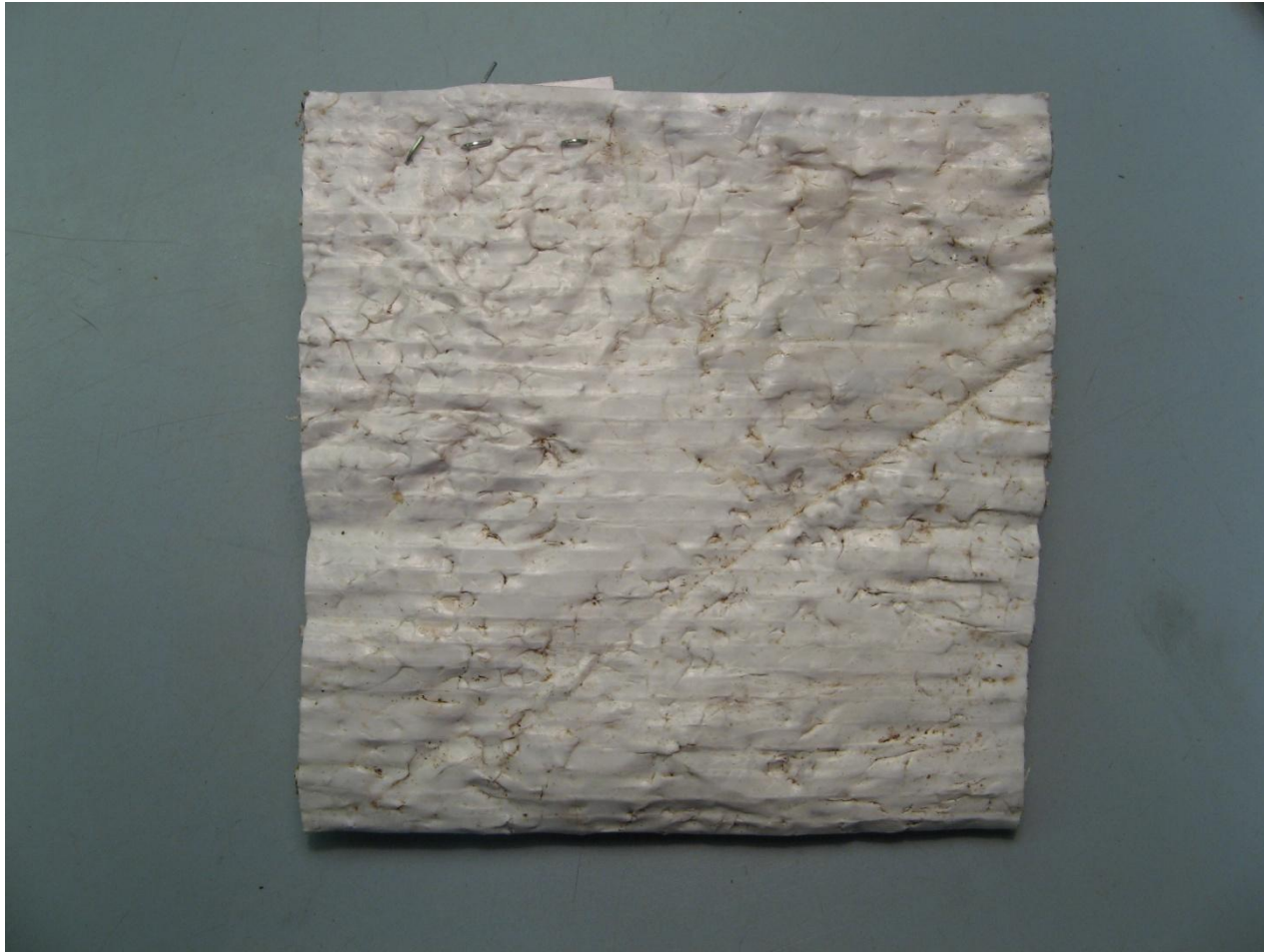
Grooves on incisor teeth give the appearance of 4 small teeth in a row.

Goat

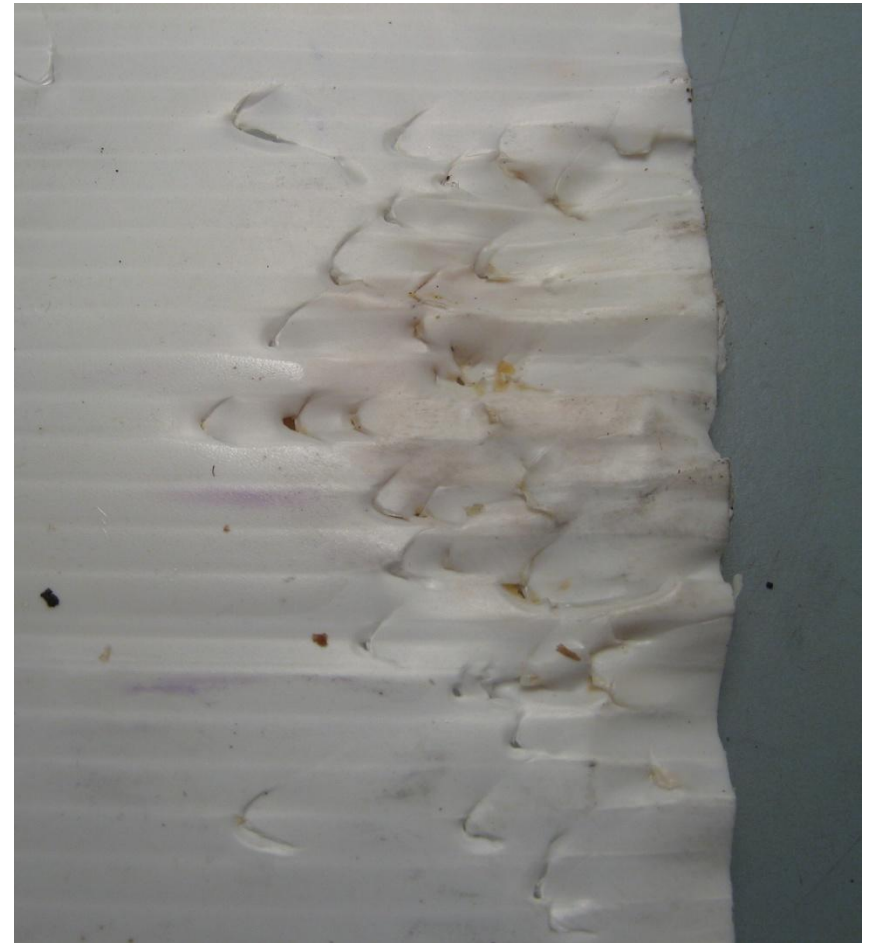


Broad incisors on mandible, no teeth opposite incisors in upper jaw

Pig?



Kea



Summary: ID Possums

- Look for extensively crushed (but not cut or holed) margins
- Confirm by identifying 5-6 mm wide incisor pair tooth impressions
- Don't be put off by apparently pointed teeth marks within crushed areas
- In absence of crushed margins look carefully for isolated broad tooth impressions (they may be very shallow)