STRESS DERMATITIS IN BRUSHTAIL POSSUMS by Lynette Millett N.B.WIRES June 2004

The following has resulted from my observations and experience in having cared for over 550 brushtail possums during the last 8 years and from information gained from being the Possum Co-ordinator for Northern Beaches WIRES for the last 7 years. It is not based on scientific knowledge or research but purely from my own experience. Possibly other means of treating and managing stress dermatitis could be just as effective but the following has given me excellent results.

WHAT IS IT?

Stress dermatitis is a term used loosely by vets and wildlife carers for brushtails with skin problems, skin infections and fur missing, particularly in the Sydney area.

WHAT IS IT CAUSED BY?

Initially by having an open wound, scratch, laceration, rash, etc.

"These wounds get infected by the staphylococcus group of bacteria" (Richard Scott B.V.Sc.(Hons) of Northern Beaches Animal Hospital.) "Staphylococci are extremely common microorganisms and cause boils and other forms of skin infection characterized by pus." (The World Book Medical Encyclopedia).

CONTRIBUTING FACTORS

Orphaned babies – rejection by parent

Parent killed

Misadventure leading to starvation

Juveniles Scratches from fighting for territory after leaving mum

Inadequate housing and nutrition especially in humid weather

Overcrowding

Adults & Geriatrics – misadventure from:

Fighting other possums for territory

Inadequate housing and food Poor eyesight and blindness Dog, cat or bird attacks Motor vehicle collisions

Injuries from falling

Female adults Scratches incurred from carrying babies on their backs.

HOW IT PRESENTS

First stage – small red spots or blisters

Possum appears wet on legs, chest area etc. possibly from the weeping of blisters.

Possum is underweight and in poor condition.

Followed by:

Scabs forming, resulting in fur loss

Scabs and affected skin can fall off, sometimes in large chunks exposing raw flesh underneath which can look like a burn.

AREAS AFFECTED

Face – around eyes (can cause impairment to vision)

Legs and shoulders

Rump area and on tail

Sides of nursing females.

TREATMENT

Antibiotics are required. My preference is for long acting penicillin (i.e. Amoxycillin) injected intramuscularly to the thigh area.

Dosage – 0.1 ml per 500 g of bodyweight.

Frequency – Every 3 to 4 days for a week (3 injections)
In severe cases extended treatment is needed.

This can be supplemented with topical creams especially on raw areas of flesh.

Vitamin E cream aids the healing process.

Antiseptic powder can be sprinkled on wet areas.

A skin and ear cleaning solution (such as Otoderm or Oticlean) can be sprayed on affected areas.

If not able to apply any of the above the penicillin on its own will achieve the desired result.

Good nutrition in care is a must, lots of fresh natives and plenty of fresh fruit daily supplemented by probiotic or drinking yoghurt to replace the gut flora lost by antibiotics

HOUSING IN CARE

On coming into care, each possum is supplied with a "possum pot" which it is released in. This consists of two 20 cm. recycled garden pots joined at their top ends with a hole cut in the bottom of one for the entrance. Bulldog clips are used initially to join the two pots so easy access is available for administering veterinary treatment. Before release the bulldog clips are replaced with permanent wiring.

RELEASE

This takes place as soon as skin is looking healthy and is clear of scabs and raw patches. We do not wait for the fur to grow back as we endeavour to get them back to their home territory within 3 weeks. This is usually achievable with adults. Juveniles are kept in care until desired weight is reached and then released in a suitable area where they can be support fed initially.

SUCCESS RATE

Of the 555 brushtails that have come into my care since 1997, 103 (20%) have had stress dermatitis in various stages. Of these, ten were blind so were immediately euthanased and not included in the following figures.

Of the 93 remaining (49 adults and 44 Juveniles) – 4 died

11 euthanased(not deemed viable)1 escaped (treatment finished)77 successfully treated & released

Of these 77 released (i.e. 82%) only two were suspected of coming back into care with further problems, so it appears to be a permanent cure in most cases. Also of note is that it does not appear to be contagious.