



Behavioral responses of juvenile Steller sea lions (*Eumetopias jubatus*) following hot-iron branding

Kristen Walker^{*a}, Jo-Ann Mellish^{bc} and Daniel Weary^a

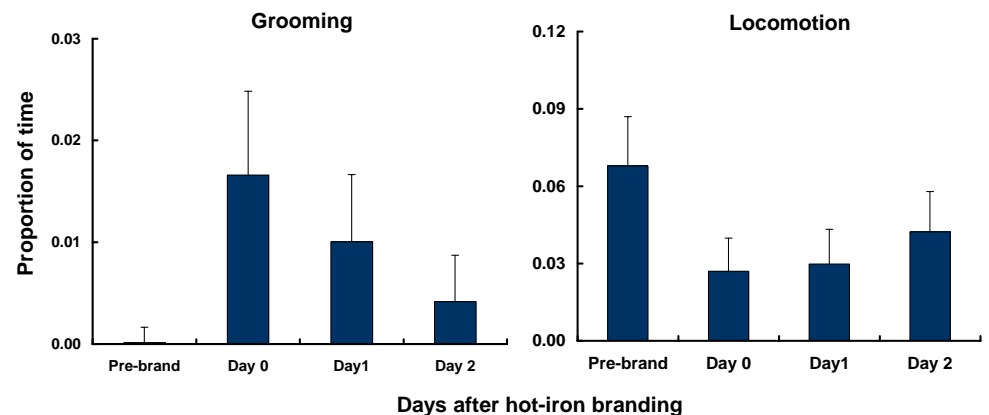
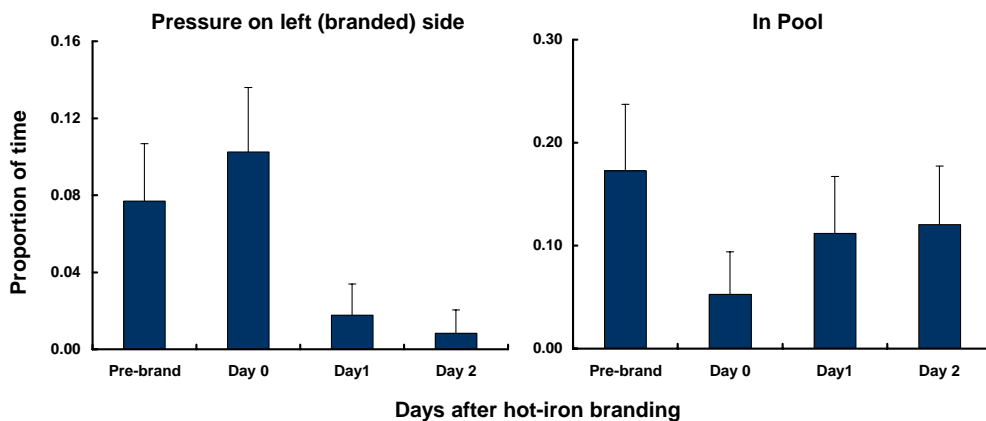
^a University of British Columbia, Animal Welfare Program, ^b Alaska SeaLife Center, ^c University of Alaska, Fairbanks



Background: Marine mammal research often requires that individuals be marked, however this may cause pain and alter behavior. Hot-iron branding is a common procedure, but little is known about how animals respond. To date, no published research has assessed behavioral responses in the days following hot-iron branding in any species.

Aims: To describe the post-operative behavioral pain responses of juvenile Steller sea lions following hot-iron branding.

Methodology: Eleven captive juvenile Steller sea lions, each acting as its own control, were observed for 3 days before and 3 days after hot-iron branding. Six behaviors related to post-operative pain were measured: time spent with pressure on the left (branded) side, time in the pool, grooming behavior, time alert, locomotion and lying behavior.



Conclusions:

- Four of the six behaviors changed after branding.
- Decreased time spent with pressure on the branded side may be associated with inflammation in the days after injury.
- Changes in these behaviors may be useful in assessing the efficacy of analgesics in reducing pain after branding.