

Behavioural response of Eurasian Lynx (*Lynx lynx*) on diverse scents applied to hair catchers

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Introduction

Within surveys of presence-absence or even population dynamics collecting non invasive genetic samples is an established method in wildlife biology. One way of DNA sampling is the use of hair-catchers. Concerning this rubbing behaviour of the examined animals could be helpful. In this study diverse scents were tested for initiating rubbing behaviour in encaged Eurasian lynx in Lower Saxony.



Methods

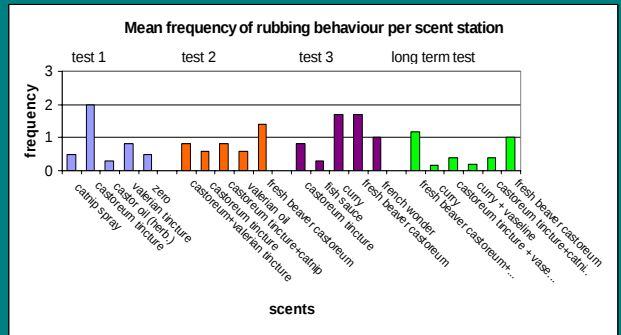
For this examination of scent influences eight adult lynxes (4;4) of three different enclosures were available (Nationalpark Harz 1;1/ Wildpark Neuhaus 1;2/ Tierpark Thale 2;1).

Four tests with different scents took place in every enclosure. We used wooden posts (1.3m) as scent stations and included pieces of carpet with twisted loops of wire. The scent was placed on the carpet. For the last test (long term test) we prepared the scent stations one week before to examine whether there is still an effect. During 1.5 to 2h of observation we recorded frequencies of sniffing and rubbing behaviour and the duration of rubbing.

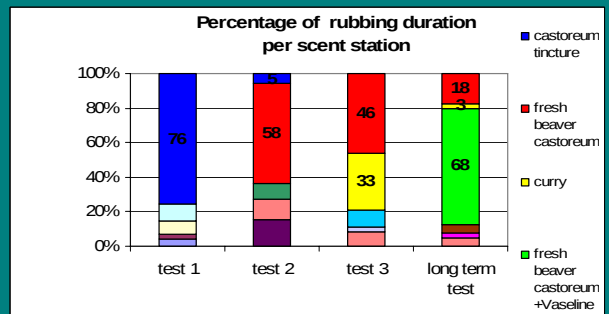
Tested Scents	Test 1	Test 2	Test 3	Test 4 (long term)
Catnip spray				
Valerian oil				
Fresh beaver castoreum				
Fresh beaver castoreum + vaseline				
Castoreum tincture				
Castoreum tincture + vaseline				
Castoreum tincture + Catnip spray				
Castoreum tincture + valerian tincture				
Castor oil (herbal)				
Valerian tincture				
Fish sauce				
Curry				
Curry + vaseline				
French wonder (unknown compound)				
"Zero" without scent				

Results

There was a high frequency of sniffing at all scent stations. Rubbing behaviour was shown less often and mainly at a few preferred scents.



Fresh beaver castoreum turned out to provoke rubbing behaviour for the longest period of time. The lynxes spent most of their total rubbing time at stations with fresh beaver castoreum in the short-term tests and at stations with fresh beaver castoreum plus vaseline in the long-term test.



Conclusion

The duration of rubbing seems to be a suitable indicator for a successful use of scents applied to hair catchers since longer rubbing may result in getting more hair.

Fresh beaver castoreum promised to be an effective hair catcher lure. However, the shown results should be confirmed in a more extensive study to gain statistical evidence.

Moreover, it is now necessary to proof their applicability to free ranging lynxes.

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