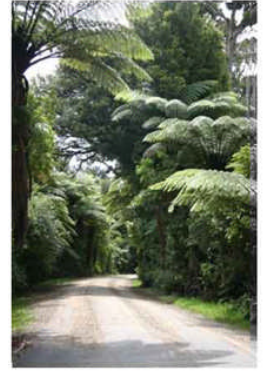


Stoat Bait Report

Salted Rabbit vs. eggs



August 2005

“Ensuring the long term survival of kiwi in Otanewainuku Forest, preserving our taonga of native flora and fauna for generations to come.”

Salted rabbit vs. hen eggs as a stoat lure

This report covers the initial findings of our ongoing trial comparing salted rabbit to the more traditional hen eggs as a stoat lure when used in tunnels with double set kill traps. It also covers what we have found to be best practice in the field and how to salt the rabbit.

Background

The Otanewainuku Kiwi Trust is a community-based trust carrying out animal pest control in Otanewainuku Forest, a DOC administered conservation area of 1,200 hectares located about 20kms from Tauranga. It is a predominately podocarp forest of particular interest, as it has never been logged. Farmland borders approximately 60 % of the reserve.

There are a lot of ideas floating around regarding what are the best lures for attracting stoats, but most don't have the fieldwork required to show that they are consistent performers. One problem with trying to gauge the effectiveness of a new bait or trap is that stoat catch rates relative to trap nights are low so it is easy for the results to get distorted. Seasonal variances may also come into play. To obtain enough data from which to draw solid conclusions, I would consider one year to be a minimum trial period.

Fresh rabbit is reportedly a good stoat and ferret lure, but goes off after only a couple of days in the field. Todd Hamilton of Whangarei Heads Landcare group reported that he had been getting good results by salting the rabbit to increase its effective field life. Todd provided us with information on what he had found to be suitable methods for salting rabbits and using it in the field.

Field Trial

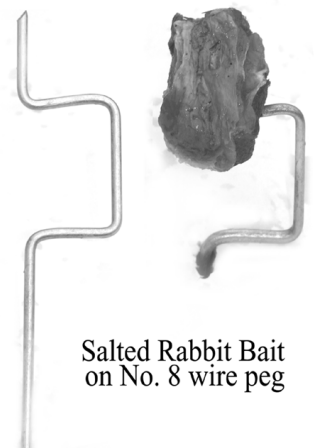
During the winter of 2003 we carried out an initial trial using salted rabbit in 60 double set kill traps. The results were quite encouraging so in Sept 2003 we decided to run a full trial over 700 hectares using 175 double sets to compare salted rabbit with hen eggs.

To give the stoats a fair choice of what they wanted for dinner we alternated the rabbit and eggs down each trap line. For the purpose of record keeping we used eggs in the even numbered tunnels and rabbit in the odd numbers. Traps are checked and rebaited every 2 weeks during summer and every 4 weeks during winter. It would have been preferable to run a paired trial but didn't have enough spare trap sets and our first priority was to maintain pest control over the whole 700 hectares.

Each of our 12 trap lines is monitored by a different volunteer so we have found it easiest to make up plastic bags containing the correct number of rabbit baits for each line, number the bags and store in our freezer ready to use.

Previous pen-trial work comparing fresh to salted rabbit, showed that while stoats were attracted to salted rabbit at very near the same rates as fresh rabbit, once they had got hold of it they didn't like to eat it. This is why we don't leave old rabbit baits in the field. If a stoat were to get hold of an old bait and didn't like the taste it would be unlikely to enter a trapping tunnel for more. Old eggs are also carried out to avoid any possible transfer of poultry disease to native birds.

We use a cut-off 3 litre juice container to carry the bags of salted rabbit in (makes a mess of your pack otherwise) and another to carry the old baits and eggs out of the field. A No 8 wire peg (see photo at right) is used to secure the baits off the ground, the idea being that they will last longer and any breeze will help the scent to travel.



Salted Rabbit Bait on No. 8 wire peg

Results

We started setting up our full trial in October '03, but due to some hold-ups with the weather and traps that we had removed for zinc plating, it was not until late November that we had the whole 700 hectares set up as we wanted. For the purpose of clarity and accurate reporting I will only include animals caught from 1st January '04.

From the 1st January 04 to the end of July 04 we caught a total of 41 stoats, 11 ferrets and 4 feral cats. Of these 32 stoats, 8 ferrets and 4 cats were caught on salted rabbit and the remaining 9 stoats and 3 ferrets were caught on hen eggs.

After making a small allowance for having a few more traps baited with rabbit than with eggs, the salted rabbit is catching 3 times the number of stoats compared to hen eggs. An unexpected benefit of the salted rabbit is the number of ferrets that we have been catching 11 in 7 months against only 2 in the previous 12 months (when we used only eggs).

The feral cats caught have been smaller juveniles who managed to squeeze through the 75mm square tunnel opening.

I have heard comments that the salted rabbit maybe seasonal: my thoughts were that it should perform better during winter when eggs aren't a natural food source. We require more data to confirm our findings, but during summer we caught twice as many stoats and ferrets on salted rabbit than we did on hen eggs and so far over the winter months we have caught five times the number of stoats and ferrets on salted rabbit as we have on eggs.

Conclusions

We have over one year's experience of using salted rabbit, and it is performing very well. Further trial work would be required to see if it works as well in deep forest situations such as in the Urewera's (where rabbit is not a common diet for stoats).

Salted rabbit is cheap bait. As our rabbits are supplied for free of charge they work out at about 3 cents per bait. Given the results so far - logic says that we should change over completely to salted rabbit and forget about hen eggs, but we have decided to continue our trial, alternating rabbit and eggs on each trap line for another year to build up more data. It may also be a good idea to always have two different lures in an area to try and pick up animals that are either not attracted to or shy of, one type of bait.

Method of Salting rabbit

The method we have chosen for salting rabbits aims to preserve as much of the meaty attractiveness as possible; they still easily last the required 2 weeks during summer and 4 weeks in winter. We don't go for a heavily salted sun dried product, which may last longer but is probably of reduced attractiveness. We have an old freezer to store whole rabbits as they come to hand, and salted rabbit baits ready for use.

Our rabbits are generously supplied (skinned and gutted), by Environment BOP from their rabbit-shooting programme. They are also principal sponsors of the Kiwi Trust. I use No 23 grade salt from Dominion Salt at \$15 for a 25 kg bag. 'Pool salt' (with no additives) is coarser and works just as well. A 25kg bag should salt around 40 average size rabbits, at about 14 baits per rabbit-yielding 550 baits. Smaller quantities of sea salt are available from fishing shops.

Rabbits are easiest to cut up with a meat cleaver or axe while they are semi-frozen. Cut them into chunks about 40 - 50 mm square, roll the rabbit in the salt to give it a good coating (the same as you would for putting bread crumbs on fish) and place in a plastic container. Cover and leave over night (~16 hours), pour off the juices and bag as required. Bread bags are ideal; we make up pre-filled bags to suit the number of traps on a line. Bags are sealed with twist ties and numbered with quantity of baits inside.

The bags of bait are stored in the freezer, but once salted do not freeze solid again as they have a limited life. I prepare about 3 or 4 weeks supply at a time to keep it as fresh as possible.

Check out our web site for updates and other information. Do contact us with any feedback or questions.

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