Summary of the Northern Ireland citizen scientist pine marten survey

Survey Results

In 2015, a total of 283 sites were visited between the months of January and May. Citizen scientists visited 62.2% (n=176) of sites whilst DT visited 37.8% (n=107) of sites surveyed. Combining this total with the number of sites visited in 2014 (when the trial in Fermanagh took place), a total of 348 sites were surveyed. Citizen scientists surveyed 63% (n=219) of sites and DT, 37% (n=129).

Twelve different mammal species were detected during the survey with a total of 408 mammal records from the locations surveyed. A total of 226 (55.4%) records were of the three target species (pine marten, red squirrel and grey squirrel). Grey squirrels were the most frequently detected species, found at 95 (27.3%) of the locations surveyed. Pine marten were detected at 73 (21%) locations and red squirrels at 58 (16.6%).

Pine marten were detected at the most sites in Co. Fermanagh and the least in Co. Londonderry (Table 1).

County	County Size	No. of sites	Sites/10 km2	Pine marten detections	Red squirrel detections	Grey squirrel detections
	(km2)	surveyed	(effort)			
Antrim	3135	64	0.20	5 (7.8%)	9 (14%)	20 (31.2%)
Armagh	1326	34	0.25	12 (35.3%)	3 (8.8%)	13 (38.2%)
Down	2481	49	0.19	12 (24.4%)	10 (20.4%)	15 (30.6%)
Fermanagh	1847	71	0.28	27 (38.0%)	15 (21.1%)	2 (2.8%)
L'Derry	1847	51	0.24	2 (3.9%)	3 (5.8%)	27 (52.9%)
Tyrone	3263	80	0.24	15 (18.7%)	18 (22.5%)	18 (22.5%)

Table 1. Comparison of the number of sites surveyed and the number of detections of the three target (pine marten, red squirrel, grey squirrel) species in the 6 counties of Northern Ireland.

Across 2014/15, sites were surveyed within 137 (79%) of the 173 10km²s in Northern Ireland. The number of sites visited in a surveyed 10 km² ranged from 1 to 12 (average of 2.5 sites) (Figure 1).

Pine marten were detected in 46 (26.5%) of surveyed 10km² (Figure 2), red squirrel in 40 (23%) (Figure 3) and grey squirrel in 56 (32.3%) (Figure 4).

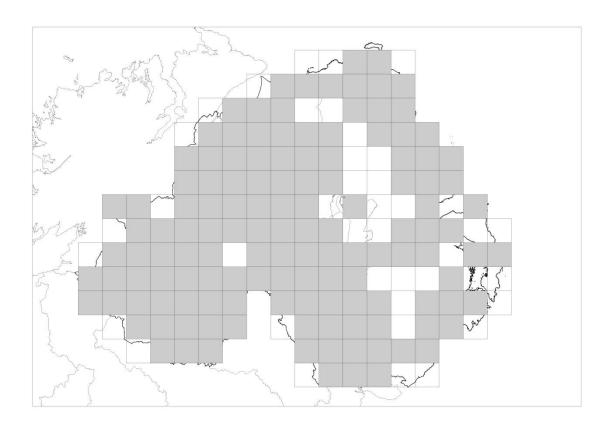


Figure 1. Distribution of 10km² squares surveyed (dark grey) as part of the citizen science pine marten and squirrel survey in 2014/15.

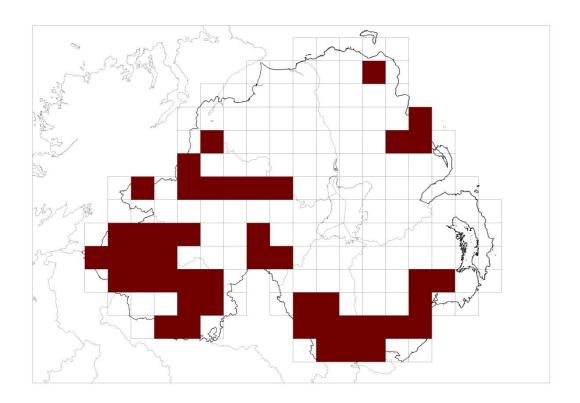


Figure 2. Distribution of 10km^2 squares containing records of pine marten as determined by the 2014/15 survey

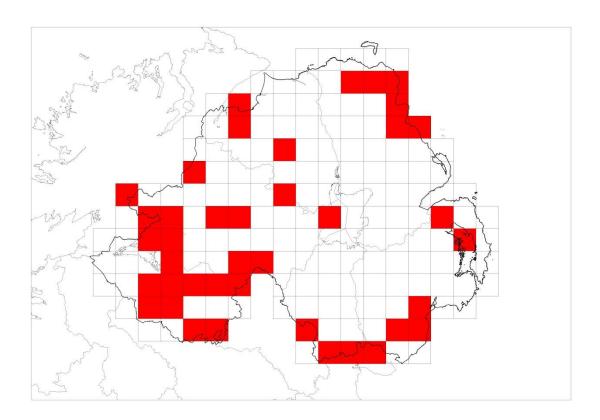


Figure 3. Distribution of 10km² squares containing records of red squirrel as determined by the 2014/15 survey

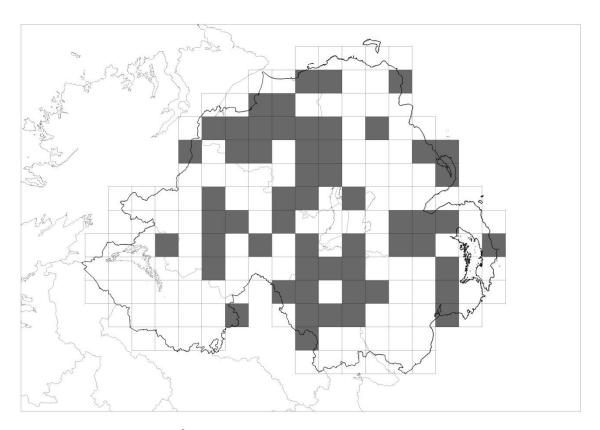


Figure 4. Distribution of 10km² squares containing records of grey squirrel as determined by the 2014/15 survey