











North West Brown Hare Project Season 1 Update

The results are in!

Dear Hare Heros.

The North West Brown Hare Project has completed its first season's surveys and the results are in.

In total 135 km2 surveys were returned for the season 2010/11. Over 230 hares were recorded in total and surveyors have walked over 400km, which is the equivalent of a journey from the Wildlife Trusts Office in Bolton to Aberdeen, as the crow flies!

These figures exclude data on mountain hares that will be dealt with in a separate report, surveys issued by Lancashire Wildlife Trust for the rest of Lancashire and the RSPBs surveys completed for the Farmland Bird Survey.

Inside This Issue	10
The results are in	1
Tales from the field	1
Maps, maps and more maps	2
Hare strongholds	2
A picture paints a thousand words	3
Back to school with stats	3
Events for 2011/12	4

People have continued to use the website, www.brownhare.org.uk, which has also received 406 hare records between November and early May.

As well mapping the results, survey data has been input into statistical software package DISTANCE and density/abundance estimates calculated for the project area as a whole and for broad landscape character types.

Tales from the field

Each survey completed by the volunteers has been different in it's own unique way.

These unique experiences are one of many benefits people get from volunteering.

Many people have seen some great wildlife, including water voles, badgers, foxes and numerous bird species.

Next years survey will include a list of Biodiversity Action Plan Species. Surveyors will be asked to record these species as well, in order to provide supporting evidence for any potential Countryside Stewardship applications.

However some people did have a few tricky moments.....

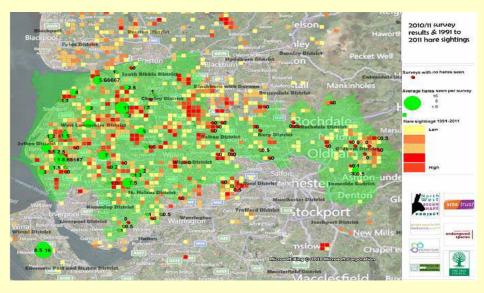
Sue Lonsdale "Please can I have a transect without a clay pigeon shoot next year."

Liz Vango Smith "I couldn't complete the last survey as some crazy cows chased me and my mum!"

Kim Ashtons additional notes "Motor bike and Model Aeroplane in survey square."

lan Goldshaw "I had to cut short my survey as I thought someone was trying to steal my car." Thankfully it turned out to be the site warden.

Maps, maps & more maps



Maps like the one seen to the left have been produced to help guide decisions on where habitat work will be focused.

While the Broad Landscape Character Map below gives a different viewpoint for the region, helping paint a picture of which areas support more hare than others. It also ignores traditional boundaries and allows for North Merseyside, South Lancashire and Greater Manchester to be considered as one region.

Hare strongholds

As you can see from the map below, the majority of the positive surveys have been on the arable farmland in the west of the region. However, this doesn't tell the full story.

The denser heather, bilberry and purple moor grass of the moorland areas and the rolling hills of the upland fringe and valleys mean that surveyors have poorer lines of sight compared to the flat expanses of arable farm land.

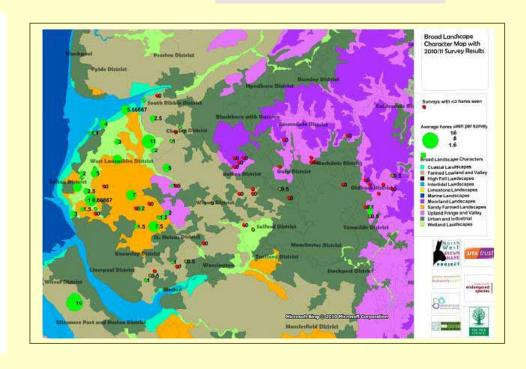
So Greater Manchester Volunteers don't be discouraged! You're only in your 1st year and may not

be that used to looking for hares or knowing where you are most likely to see them. A lot of the South Lancashire and Merseyside surveyors are into their 3^{rd} of 4^{th} year of surveying plus they are likely to see hares more regularly and so have a better idea of where to look.

"The project area has a number of hare strong holds"

The project area has a number of hare strong holds. For South Lancashire and Merseyside this seems to be in the former Wetland/mossland areas and the sandy farmed landscapes.

Greater Manchester seems to have three main strong holds; an upland/moorland fringe area around Saddleworth area of Oldham, upland/moorland another area around fringe Anglezarke Reservoir and West Pennine Moors and Salford/Wigan finally the Mosses area.



A picture paints a thousand words

This great picture was taken by one of Tameside Councils staff. They found three newly born leverets in the middle of a field and lifted them to safety. Now, ordinarily, I'd say that you should always leave leverets where you find them and if you do have to move them, make sure that your hands are clean and odour free. However, the field in question happened to have a music festival taking place in it, with the three leveret's right in the middle!

According to the festival goer, the leverets tried to come back into the middle of the field at night to be fed.



Back to school with stats

Density and abundance estimates have been calculated for each of these character areas and can be seen in the table below. This baseline data will now allow year on year comparisons to be made of how brown hares are faring and inform habitat management across the region.

Some of this mapping and analysis is already helping to assist conservation efforts in the region. The project has contributed to a Higher Level Stewardship application in Wigan and the Wildlife Trusts Lottery Bid to purchase Little Wooden Moss. The results may also be used to inform Wigan's Nature Improvement Area bid.

A project is also in the offing with Martin Mere and Mere Sands Woods to connect the two areas by approaching land owners in between and promoting government stewardships schemes. Some hedgerow planting and footpath/signage improvement will also take place to reduce disturbance in the area.

Table 1: Summary of brown hare survey results 2010/11

D = estimated density (per km square) calculated by DISTANCE

D LCL = Density lower 95% confidence limit D UCL = Density upper 95% confidence limit N = estimated abundance over pooled transects N LCL = Abundance lower 95% confidence limit N UCL = Abundance upper 95% confidence limit CV = coefficient of variance;

ESW = estimated strip width (m) from transect line where the number of animals missed within is equal to the number of animals recorded beyond ns = number of sample transects analysed by DISTANCE

nh = total number of hares recorded from pooled transects

total effort = total length of pooled transects (km) hares/km square = density of hares calculated by total number of hares observed per 1km square surveyed

	D	D LCL	D UCL	N	N LCL	N UCL	CV	ESW	ns	nh	Total Effort	Hares/ km sq
Wetland (mossland)	4.99	4.02	6.18	115	92	142	10.78	91.38	23	64	65.83	2.78
Urban and Industrial	1.29	0.58	2.87	18	8	40	31.67	57.125	14	6	40.49	0.43
Upland Fringe and Valley	0.87	0.46	1.63	17	9	33	28.35	101.91	20	12	62.04	0.60
Sandy Farmed	2.68	1.78	4.03	67	44	101	20.7	164.57	25	64	71.45	2.56
Moorland Farmed Lowland and	n/a	n/a	n/a	n/a	n/a	n/a	n/a	300	14	1	49.24	0.07
Valley	2.4	1.96	2.94	65	53	79	10.12	133.49	27	58	90.49	2.15
Coastal & Intertidal	3.64	2.34	5.65	44	28	68	21.68	125.82	12	34	30.56	2.83
Whole area	2.41	2.1	2.77	326	284	375	175.2	118.57	135	239	410.1	1.77

Volunteering & events for 2011/2012

If anyone reading this newsletter would like to get more involved, you can do so by sending in your hare sightings to the website. An even bigger help would be to volunteer to complete a short survey in your local area. It only takes an hour or so and is a great way to get out and get to know your local area.

Details of some of this and next year's training events and walks can be found on the website www.brownhare.org.uk

While some dates still have to be confirmed.

If any one/group would like a training event in their area, feel free to contact Samuel Bolton via the details below.

And Finally.....

A massive thanks must go to everyone that has sent in records and completed surveys for the project.

Your work is helping to make a real difference for hares in the region.

However, our work is not yet finished. I'll be emailing you all again soon with details of this seasons surveys and asking you to carry on the great work!



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