



BPA Conservation Breeding Plan 2021 Middle White



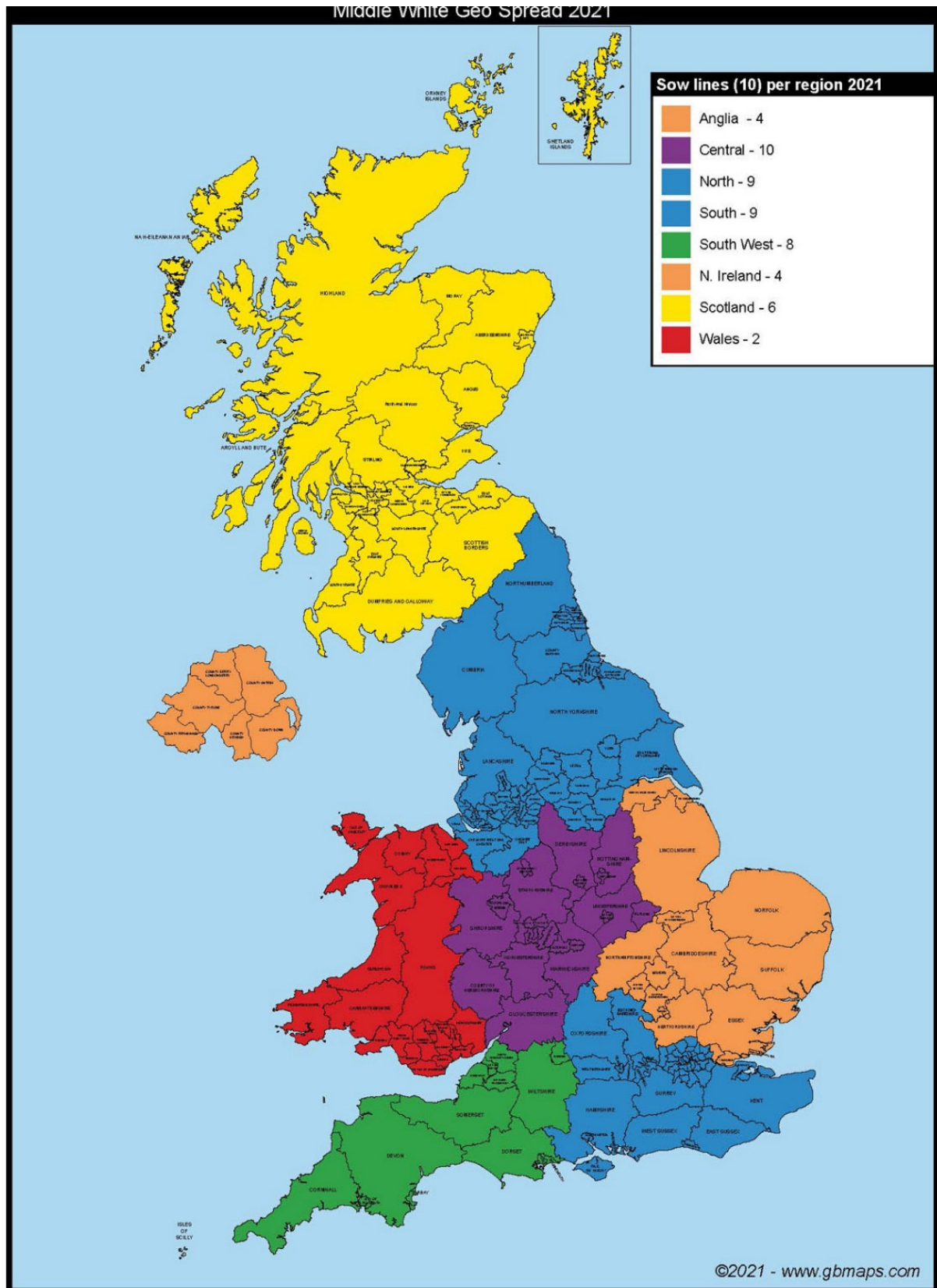
The Middle White faces some unique challenges with only 70 breeders, the lowest amongst the traditional breeds and almost one third of the sow population held in a single herd. The Ladys Maid and Silk lines prioritised last year are now over the 5 herd threshold leaving only the Modiste line in need of improvement.

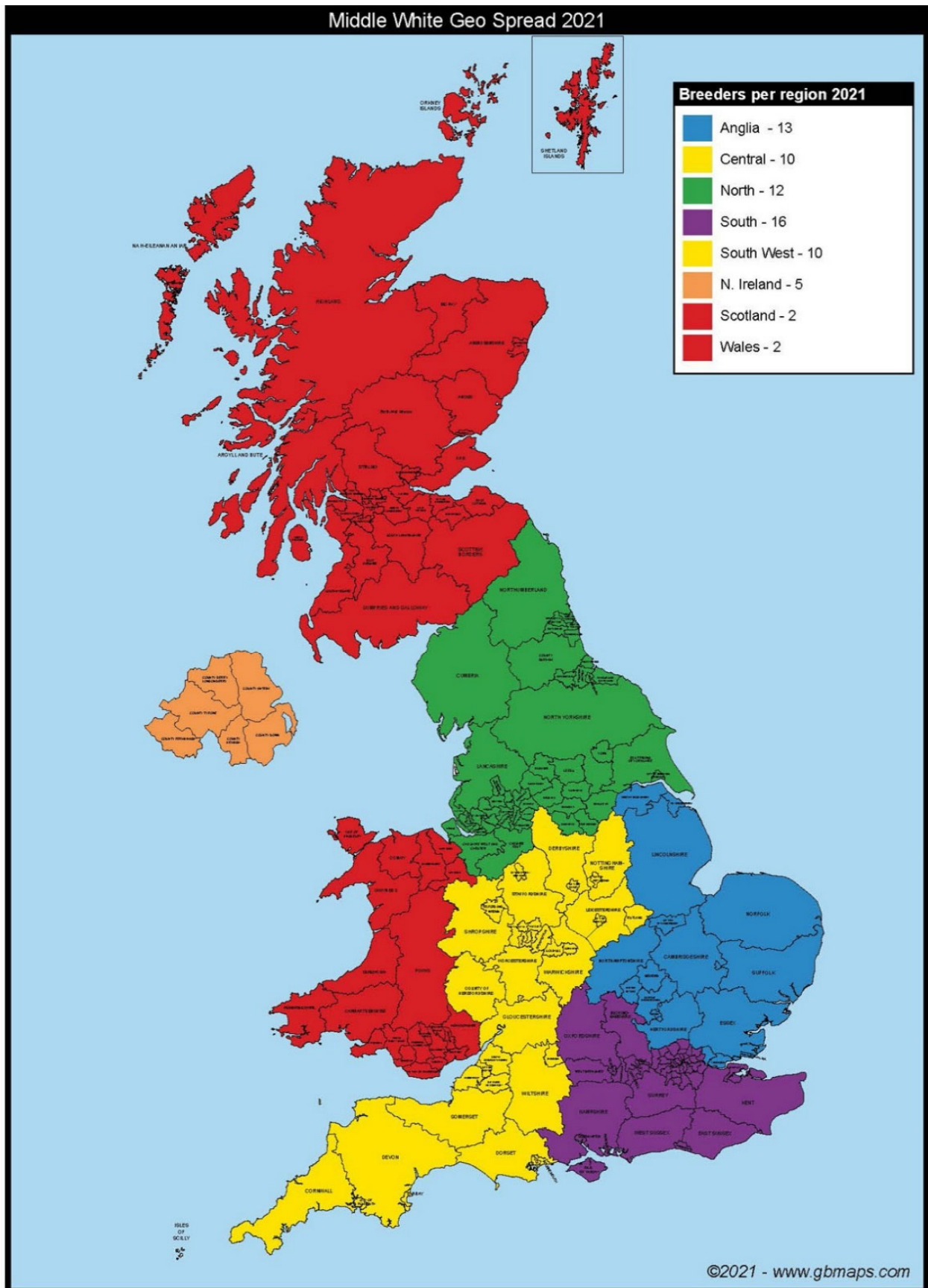
Members keeping this line					Line Name	Total Sows				
2020	2019	2018	2017	2004		2020	2019	2018	2017	2004
12	12	15	16	15	Alma Rose	34	33	37	40	31
10	12	10	8	9	Carnation	28	27	31	27	40
8	9	9	10	16	Dorothy	25	22	25	22	29
37	33	33	33	39	Fair Lady	71	66	75	79	67
7	4	5	4	4	Ladys Maid	23	23	14	15	10
3	5	8	8	11	Modiste	19	23	16	24	12
6	6	5	5	11	Purity	18	20	14	22	14
7	5	6	9	10	Silk	26	22	22	26	11
18	16	20	22	28	Woodlands Lady	48	42	43	52	41
22	21	21	20	18	Yootha	53	47	53	54	30
					Total	345	325	330	361	285
Percentage of sows with purebred litters						40%	36%	39%	58%	

Members keeping this line					Line Name	Registered Boars				
2020	2019	2018	2017	2004		2020	2019	2018	2017	2004
12	12	11	13	23	Captain	15	15	15	20	24
13	8	7	7	12	Mischief	15	10	14	11	14
7	8	6	10	12	Rajah	11	11	9	12	11
15	12	16	13	20	Revival	20	18	21	16	20
8	10	9	11	4	Sovereign	10	11	12	13	4
					Total	71	65	71	72	73
Members keeping registered pigs						72	66	77	77	104

The boar lines all meet the 5 and 5 target and the balance of the lines is good.

This year's graphs use a sliding rainbow scale from red to purple. The colours do not represent particular values as the range of lines and breeders between breeds is very wide. What they do show for each breed is where the breed is strongest in terms of lines and breeders and where it is weakest







BPA Conservation Breeding Plan 2021

Geographical Concentration of lines and breeders



These tables show in more detail the progress being made to establish all the lines in as many regions as possible. Green indicates that the number of lines or regions has improved or the maximum has been achieved. Amber indicates stability and red shows where numbers have gone backwards.

	Alma Rose	Carnation	Dorothy	Fair Lady	Ladys Maid	Modiste	Purity	Silk	Woodlands Lady	Yootha	Total sows / region	2020 Sow lines / region	2019 Sow lines / region
Anglia	0	3	0	13	0	0	0	0	13	7	36	4	4
Central	16	16	11	9	17	14	11	9	11	18	132	10	10
North	6	9	5	13	1	0	1	9	16	5	65	9	9
South	1	0	1	18	2	1	1	1	1	16	42	9	9
South West	6	0	6	11	2	4	0	1	3	3	36	8	6
N. Ireland	5	0	0	3	0	0	4	0	1	0	13	4	4
Scotland	0	0	2	1	1	0	0	1	2	4	11	6	1
Wales	0	0	0	1	0	0	0	5	0	0	6	2	3
2020 Regions with this line	5	3	5	8	5	3	4	6	7	6	52		
2019 Regions with this line	5	4	4	7	3	3	4	4	5	7	46		
Total UK Middle White Sows											341		

The Central region is still the only area with all the sow lines but the breed is well represented in a number of other regions and is establishing a foothold in Scotland.

region	Captain	Mischief	Rajah	Revival	Sovereign	Total Boars / region	2020 Boar lines / region	2019 Boar lines / region	2020 Breeders /Region	2019 Breeders /Region
Anglia	2	2	1	1	0	6	4	3	13	8
Central	3	5	3	7	6	24	5	5	10	12
North	3	4	3	2	1	13	5	5	12	14
South	2	2	0	5	0	9	3	4	16	14
South West	1	0	2	5	2	10	4	4	10	7
N. Ireland	3	0	0	0	1	4	2	2	5	6
Scotland	1	2	0	0	0	3	2	0	2	1
Wales	0	0	0	0	0	0	0	0	2	2
2020 Regions with this line	7	5	4	5	4					
2019 Regions with this line	7	5	4	5	4					
Total UK Middle White Boars					69	Total UK Middle White Breeders				70

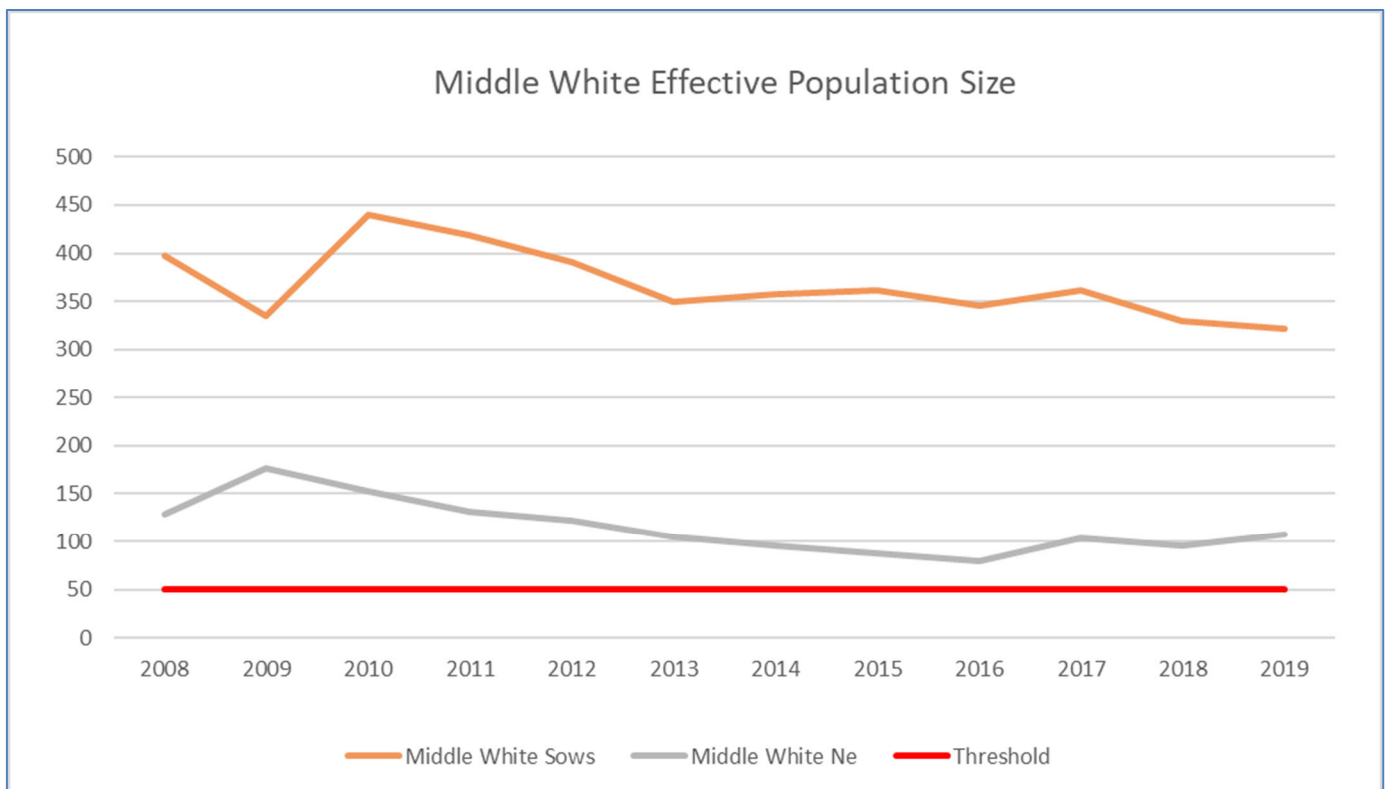
Most of the English regions have a reasonable number of boar lines and 2 lines are now present in Scotland. The individual lines have maintained their distribution across the regions.

Three more boars are needed to complete the interim target of 10 boars and all the lines. A new Mischief boar is being bred for the Genebank and should be available later in the year.

HB Reg No	Name	DOB	Ear No	IB
CSC/1	Slievenalargy Revival	10/10/1999	CSC/1	0.004
CVM/297	Westham Captain 297	24/02/2002	CVM/297	0.0332
R000472MW	Degiorgio Rajah 15	30/04/2005	MTE/015	0.0297
R000937MW	Lakeview Captain 1	05/11/2005	TBH/1	0.0256
R000702MW	Westham Mischief 567	20/08/2006	CVM/567	0.032
R002187MW	Solitaire Sovereign	06/02/2012	YFA/16	0.018
R003274MW	Tatton Captain	12/08/2018	TDF/17	0.0124
Inbreeding coefficient for the Middle White Genebank				0.0221

The inbreeding co-efficient of the national herd is much higher than that of the boars in the genebank. The boars in the genebank go through a very careful selection process which cannot be applied to all the different breeders across the country. We are beginning a programme to encourage breeders with sows that are least related to the national population to keep progeny from those litters and breed them back into the herd. This is a very long and complex process but it is vitally important that we try to develop this type of programme for the future. We hope very much that the new agriculture bill with its emphasis on native breeds will help us develop this programme in the future.

Mean Inbreeding for the UK Middle White Population: 2019: 0.0500 2020: 0.0503



Effective population (N_e) size is a measure of the genetic health of the breed. It is calculated as part of the National Inventory of Farm Animal Genetic Resources maintained by Defra based on the annual bloodline survey figures for the UK that we supply. Our 2020 figures will be added in May this year when the inventory is updated. The effective population size of all our native breeds is used in an index as part of the UK monitoring of biodiversity as part of our commitments under the Convention on Biodiversity to which the UK is a signatory. The effective population size is linked to the actual population but there are ways in which we manage this even when sow numbers are falling and this will be our challenge whenever we are faced with difficult times for pedigree breeders.



BPA Conservation Breeding Plan 2021 Genebanking and Genetic Health



Middle White Objectives for 2021

- improve the numbers and distribution of the Modiste line.
- Target progeny of sows least related to the general population for breeding
- Add a new Mischief boar to the Genebank.