



BPA Conservation Breeding Plan 2022

Middle White Effective Population and Geographical Distribution

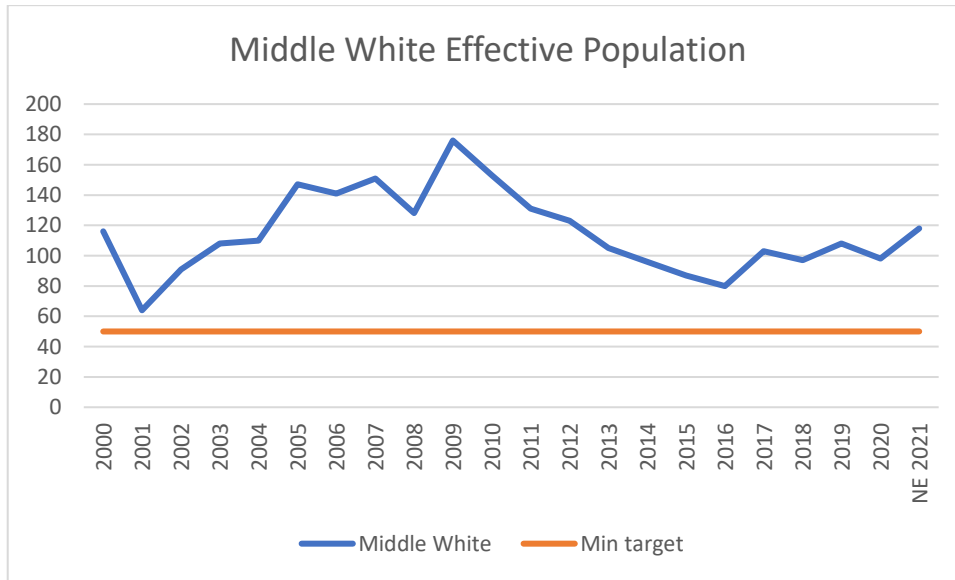


Our original conservation target was to ensure that we had at least 5 sows or boars in each line and that each line was represented in at least 5 herds. The Middle White breed has met this target since 2020. The Middle White faces some unique challenges with only 80 breeders, the lowest amongst the traditional breeds and almost one third of the sow population held in a single herd. It is very encouraging to see the upward trend in the number of breeders keeping Middle Whites.

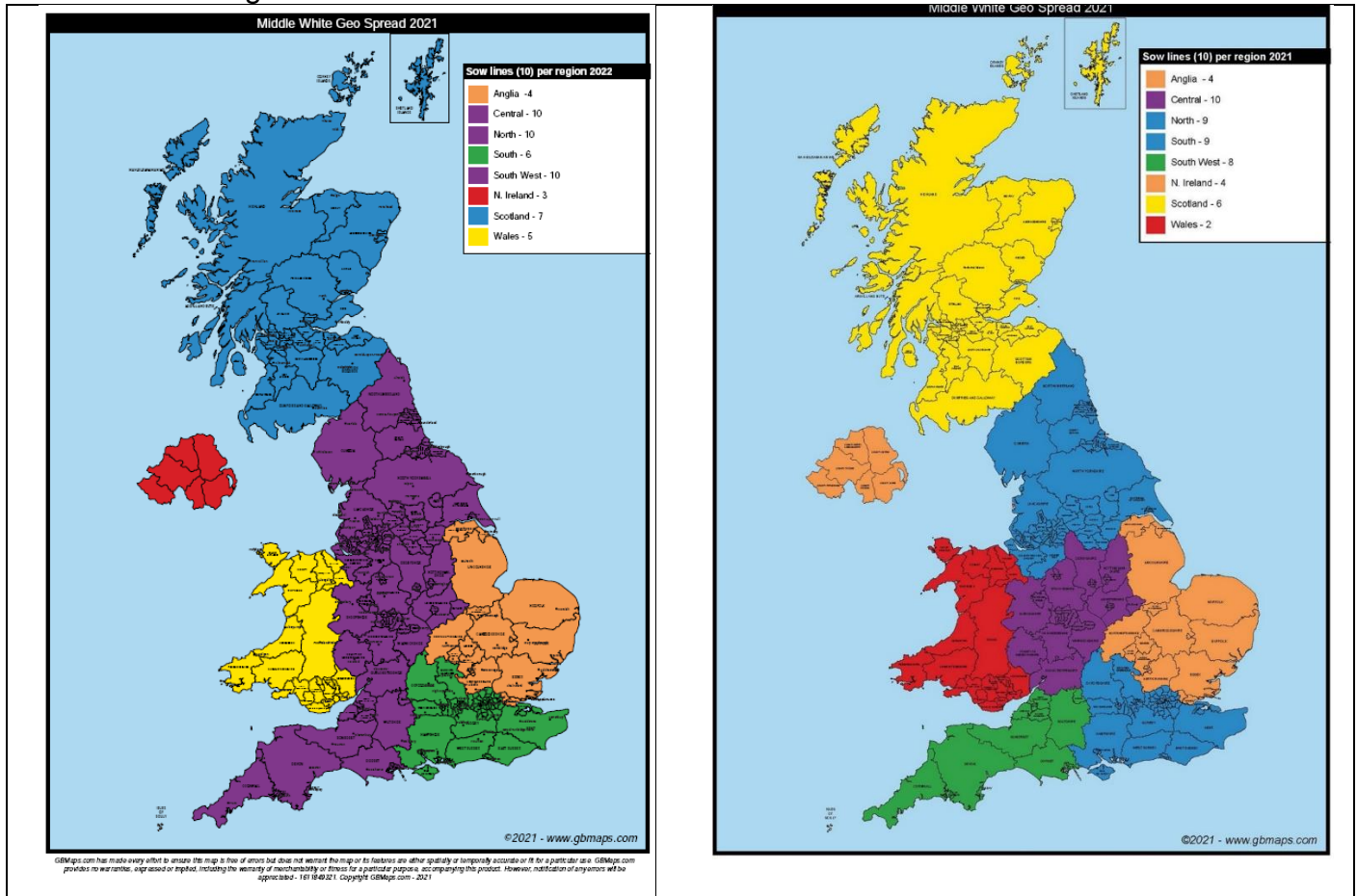
Members keeping this line					Line Name	Total Sows				
2021	2020	2019	2018	2004		2021	2020	2019	2018	2004
13	12	12	15	15	Alma Rose	43	34	33	37	31
11	10	12	10	9	Carnation	28	28	27	31	40
11	8	9	9	16	Dorothy	34	25	22	25	29
31	37	33	33	39	Fair Lady	67	71	66	75	67
7	7	4	5	4	Ladys Maid	17	23	23	14	10
5	3	5	8	11	Modiste	24	19	23	16	12
7	6	6	5	11	Purity	18	18	20	14	14
8	7	5	6	10	Silk	27	26	22	22	11
17	18	16	20	28	Woodlands Lady	35	48	42	43	41
19	22	21	21	18	Yootha	56	53	47	53	30
Total						349	345	325	330	285
Percentage of sows with purebred litters						38%	40%	36%	39%	

Members keeping this line					Line Name	Registered Boars				
2021	2020	2019	2018	2004		2021	2020	2019	2018	2004
14	12	12	11	23	Captain	19	15	15	15	24
15	13	8	7	12	Mischief	17	15	10	14	14
8	7	8	6	12	Rajah	9	11	11	9	11
15	15	12	16	20	Revival	21	20	18	21	20
11	8	10	9	4	Sovereign	14	10	11	12	4
Total						69	71	65	71	73
Members keeping registered pigs						80	72	66	77	104

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 2021 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



These maps use a sliding rainbow scale from red to purple. The colours do not represent specific values as the range of lines between breeds is very wide. What they do show for each breed is where the breed is strongest in terms of lines and where it is weakest



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These tables show in more detail the progress being made to establish all the lines in as many regions as possible.

	Alma Rose	Carnation	Dorothy	Fair Lady	Ladys Maid	Modiste	Purity	Silk	Woodlands Lady	Yootha	Total sows / region	2021 Sow lines / region	2020 Sow lines / region	2019 Sow lines / region
Anglia	0	2	0	15	0	0	0	0	9	6	32	4	4	4
Central	16	17	14	11	11	15	12	12	10	18	136	10	10	10
North	10	6	5	13	1	3	3	10	10	5	66	10	9	9
South	1	0	2	13	2	0	0	0	1	17	36	6	9	9
South West	9	1	5	9	2	6	1	2	2	3	40	10	8	6
N. Ireland	7	0	0	1	0	0	2	0	0	0	10	3	4	4
Scotland	0	1	5	2	1	0	0	2	2	7	20	7	6	1
Wales	0	1	3	3	0	0	0	1	1	0	9	5	2	3
2021 Regions with this line	5	6	6	8	5	3	4	5	7	6	349			
2020 Regions with this line	5	3	5	8	5	3	4	6	7	6				
2019 Regions with this line	5	4	4	7	3	3	4	4	5	7				

Region	Captain	Mischief	Rajah	Revival	Sovereign	Total Boars / region	2021 Boar lines / region	2020 Boar lines / region	2019 Boar lines / region	2021 Breeders /Region	2020 Breeders /Region	2019 Breeders /Region
Anglia	2	2	1	2	2	9	5	4	3	9	13	8
Central	5	4	2	6	5	22	5	5	5	13	10	12
North	2	5	3	2	1	13	5	5	5	14	12	14
South	2	1	0	7	1	11	4	3	4	10	16	14
South West	4	2	1	4	4	15	5	4	4	4	10	7
N. Ireland	2	0	1	0	1	4	3	2	2	3	5	6
Scotland	1	2	0	0	0	3	2	2	0	3	2	1
Wales	1	1	1	0	0	3	3	0	0		2	2
2021 Regions with this line	8	7	6	5	6	80						
2020 Regions with this line	7	5	4	5	4							
2019 Regions with this line	7	6	5	5	6							

Two 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	0.0034
CVM/297	Westham Captain 297	24/02/2002	CVM/297	0.0286
R000472MW	Degiorgio Rajah 15	30/04/2005	MTE/015	0.0301
R000702MW	Westham Mischief 567	20/08/2006	CVM/567	0.0302
R000937MW	Lakeview Captain 1	05/11/2005	TBH/1	0.0229
R002187MW	Solitaire Sovereign	06/02/2012	YFA/16	0.021
R003274MW	Tatton Captain	12/08/2018	TDF/17	0.0128
R003537MW	Junior Rajah 2	14/01/2021	LXF/120	0.0162
Average in breeding of Middle White Boars in the Genebank				0.0207

Mean Inbreeding for the UK Middle White Population:
2021: 0.0532, 2020: 0.0503, 2019: 0.0500

Middle White Objectives for 2021

- Improve the numbers and distribution of the Modiste line.
 - *The Modiste numbers have increased by 25% and it is now being bred in 5 herds*
- Target progeny of sows least related to the general population for breeding
 - *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 has had some success with one of the progeny of such a mating included in a conservation move to Northern Ireland*
- Add a new Mischief boar to the Genebank.
 - *A new Rajah boar from the conservation move to Northern Ireland has been added to the Genebank*

Middle White Conservation Targets for 2022

- Prioritise the Ladys Maid, Modiste and Silk lines
- Prioritise the Rajah boar line
- Breed a Mischief boar for the Genebank