

# BPA Conservation Breeding Plan 2023 Gloucestershire Old Spots Survey Results

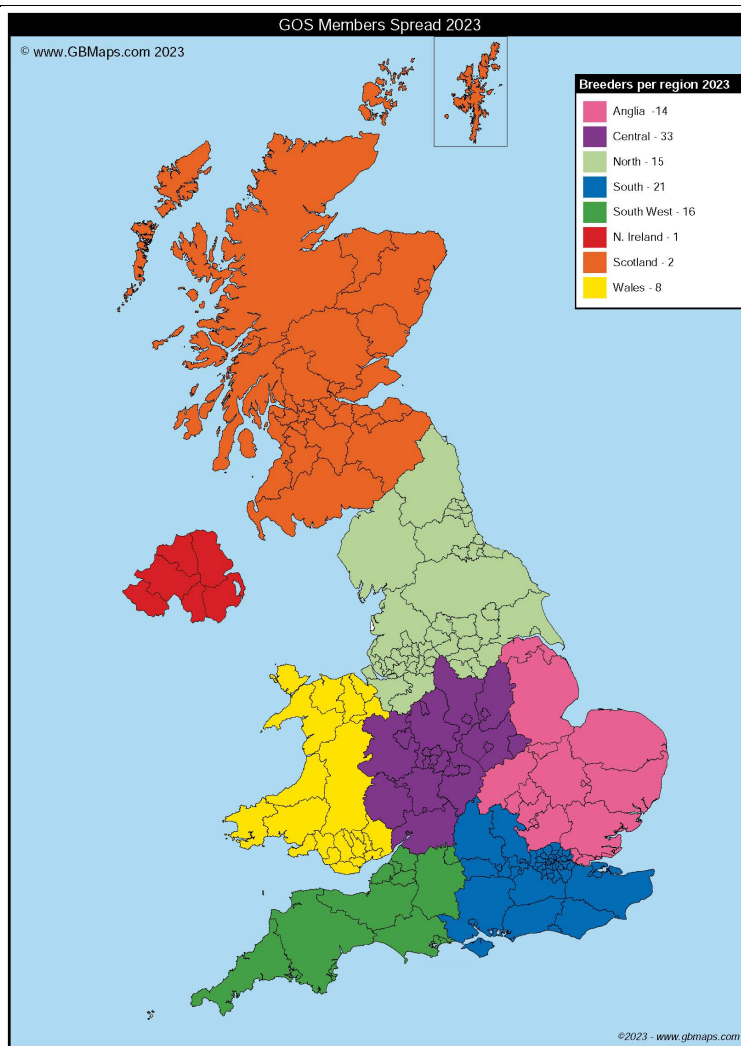
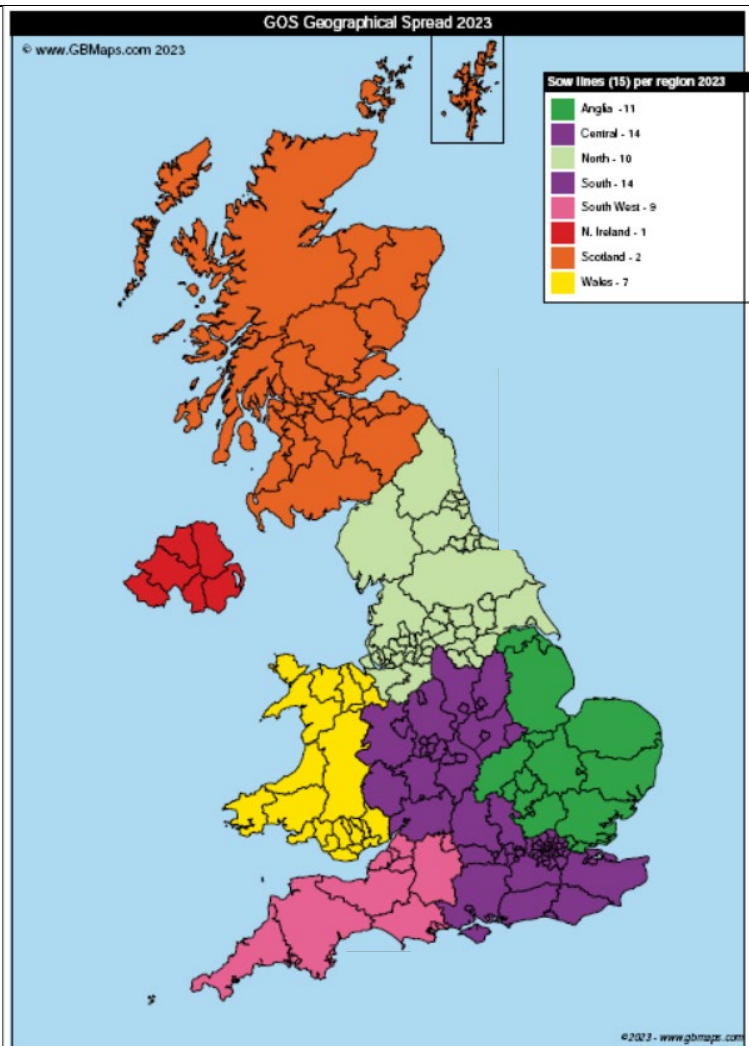
Gloucestershire old Spots continue to maintain a good number of all lines despite losing a few breeders. There are no lines with less than 5 animals or 5 keepers.

Members keeping this sow line					Sow Line	Total Sows				
2022	2021	2020	2019	2004		2022	2021	2020	2019	2004
9	10	9	12	37	Bluebell	38	29	35	31	61
10	12	10	11	15	Countess	23	24	21	25	26
12	20	15	10	15	Dahlia	33	53	42	24	26
20	26	24	25	23	Dolly	53	57	51	59	43
20	24	22	21	46	Ellen	54	58	58	45	107
14	14	17	14	31	Josephine	38	42	41	38	56
10	10	9	8	24	Muriel	28	22	20	20	42
16	15	16	21	12	Primrose	31	26	29	43	22
31	38	35	40	47	Princess	80	103	107	102	83
9	10	10	9	34	Princess Ann	36	38	44	42	61
22	25	28	25	14	Princess Freda	49	52	46	39	24
13	12	12	10	31	Princess Joan	31	25	39	25	63
14	17	11	11	37	Princess Mary	46	41	53	33	55
7	10	11	9	24	Star	26	22	34	17	45
7	11	17	14	15	Star Antoinette	11	20	18	25	22
					<b>Total</b>	<b>577</b>	<b>612</b>	<b>638</b>	<b>568</b>	<b>736</b>
<b>Percentage of sows with purebred litters</b>						<b>57%</b>	<b>56%</b>	<b>58%</b>	<b>64%</b>	

Members keeping this boar line					Boar Line	Registered Boars				
2022	2021	2020	2019	2004		2022	2021	2020	2019	2004
19	23	23	23	46	Gerald	28	33	36	35	51
29	31	29	23	31	Patrick	34	43	39	24	35
17	15	19	23	39	Rufus	23	25	22	27	40
29	35	36	35	43	Sam	38	42	41	37	47
					<b>Total</b>	<b>123</b>	<b>143</b>	<b>138</b>	<b>123</b>	<b>173</b>
<b>Members keeping registered pigs</b>						<b>115</b>	<b>135</b>	<b>133</b>	<b>141</b>	<b>231</b>

The Gloucestershire Old Spots have maintained good numbers of all the lines despite losing 20 breeders in the last year. Most of the lines have seen a fall in numbers but only the Star Antoinette gives cause for serious concern. A decline of 6% in the Gloucestershire Old Spots herd is disappointing but this should be seen in the context of a 20% decline in the national pig breeding herd over the same period.

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



Region	Bluebell	Countess	Dahlia	Dolly	Ellen	Josephine	Muriel	Primrose	Princess	Princess Ann	Princess Freda	Princess Joan	Princess Mary	Star	Star Antoinette	Total	2022 Sow lines / region	2021 Sow lines / region	2020 Sow lines / region
Anglia	4	2	4	3	5	7	0	1	10	0	3	5	5	0	0	49	11	11	13



# BPA Conservation Breeding Plan 2023 Gloucestershire Old Spots Effective Population and Geographical Distribution



Central	31	5	6	36	40	15	10	15	37	13	24	18	26	19	0	295	14	14	15
North	2	5	0	11	2	1	3	0	5	21	8	5	0	0	0	63	10	11	12
South	1	5	1	2	3	13	2	11	20	2	2	2	6	2	3	72	15	14	12
South West	0	6	20	0	4	1	9	0	5	0	9	0	9	4	8	67	10	13	14
N. Ireland	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	2	2
Scotland	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	5	2	2	2
Wales	0	0	0	1	0	1	4	3	3	0	0	1	0	1	0	14	7	9	6
<b>2022 Regions with this line</b>	4	5	5	5	5	6	5	5	6	3	6	5	4	4	2				
<b>2021 Regions with this line</b>	5	6	6	5	6	6	5	4	6	2	7	6	4	4	4				
<b>2020 Regions with this line</b>	4	6	4	6	7	5	5	5	5	3	6	5	5	5	5				

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

It is not surprising that with a 50% decline in Star Antoinette numbers we have seen a similar decline in the distribution of this line

RegioStrn	Gerald	Patrick	Rufus	Sam	Total Boars	2022 Boar lines / region	2021 Boar lines / region	2020 Boar lines / region	2022 Breeders /Region	2021 Breeders /Region	2020 Breeders /Region
Anglia	2	3	5	4	14	4	4	4	14	21	23
Central	9	13	8	13	43	4	4	4	33	37	37
North	5	7	4	3	19	4	4	4	15	13	14
South	3	5	5	4	17	4	4	4	21	25	26
South West	4	4	1	10	19	4	4	4	16	21	22
N. Ireland	1	1	0	0	2	2	4	4	1	4	5
Scotland	1	0	0	1	2	2	4	4	2	3	4
Wales	3	1	0	3	7	3	4	4	8	8	10
<b>2022 Regions with this line</b>	8	7	5	7							
<b>2021 Regions with this line</b>	8	7	5	7							
<b>2020 Regions with this line</b>	7	7	7	7							

The Gloucestershire Old Spots is the first breed to have completed the target of 10 boars in the Genebank but luckily the demand for GOS semen means that at least one GOS boar is usually available for AI. We will continue to work with Deerpark to try and ensure that boars going for AI are as unrelated to the general population as possible.

HB No	Name	DOB	Ear No	IB
EXE/30	Greenan Sambo	01/12/2000	EXE/30	0.0589
BSM/484	Kilcot Rufus 4	07/01/2002	BSM/484	0.0507
SSG/80	Whinneyhill Sambo 3	06/02/2003	SSG/80	0.0381
R001685GS	Greenan Rufus 4	20/05/2004	EXE/160	0.0461
R001153GS	Alsa Gerald 451	01/01/2005	KCE/451	0.0176
R003320GS	Windmill Patrick 6	25/01/2007	HCR/1348	0.0254
R004202GS	Deerpark Patrick 2	31/10/2007	ROA/2	0.0244
R009570GS	Donagheragh Sambo 13	15/02/2014	KBB/13	0.0415
R009840GS	Pebblesford Gerald 722	05/07/2014	LHC/722	0.0114
R010731GS	Winterwood Patrick 16	16/01/2017	SJA/1491	0.0142
<b>Inbreeding coefficient of the GOS Genebank</b>				<b>0.0328</b>

Mean Inbreeding for the UK Gloucestershire Old Spots Population:

2019: 0.0470, 2020: 0.0515, 2021: 0.04629, 2022: 0.05241

### Gloucestershire Old Spots Objectives for 2022

- *Improve distribution of the Princess Ann line and increase the Muriel and Primrose lines*

The Princess Ann line is now in an additional region. Both the Muriel and Primrose lines have seen an increase in numbers.

- *Continue to work on the Rufus boar line*

Whilst there has not been an increase in the numbers of Rufus boars they have also not seen much of a decrease considering the overall drop in numbers of pigs.

- *Coordinate distribution of lines with financial support from the BPA and the Gloucestershire Old Spot Breeders Club*

There has been a decline in the number of regions with the lines, but this is not unexpected in the current climate. The lines remain spread into more than one area.

### Gloucestershire Old Spots Conservation Targets 2023

- Arrest the decline of the Star Antoinette line
- Move the Rufus boar into Wales so the all four lines are in England and Wales.
- Improve the distribution of the Bluebell, Princess Ann, Princess Mary, Star and Star Antoinette lines so that all lines are being bred in at least 5 regions.