

ASPEN (*Populus tremula*) Species Action Plan

1. Introduction

Together with the black and (possibly) grey poplar, the aspen is one of three native poplars in Britain. Pollen analysis indicates that it was one of the pioneer trees after the end of the last glaciation (i.e. it was one of the first trees to colonise Britain after the retreat of the ice sheet). It is likely to have become an understorey or minor component of the 'wildwood' that subsequently developed when larger trees such as oak and elm started to dominate the canopy. It never becomes a large tree in Britain and is most often observed as a population of suckers which readily sprout from the original tree roots. This is especially the case in southern England. It does however grow larger in other parts of its range, for example in Scandinavia, where it is often planted as a timber tree, being important in matchstick production. The wood has been used in Britain in the past; Rackham (1990) states that aspen was used in the production of clogs, arrows and buildings. This plan is complementary to the habitat action plan for **Ancient semi-natural woodland**.

2. Current Status

2.1 National

In Britain trees can be derived from native or planted stock. The species can be common in Scotland and in some parts of lowland England. Its suckering nature can actually make it a pest when it invades field edges where grassland is the desired habitat. It occurs in a range of habitats including woodlands, scrub, hedges and moors and usually persists best where the ground is wetter. It is not a threatened or rare species nationally and is not currently on the national BAP list.

2.2 Local

In Northumberland Swan (1993) states that the species is scattered and occasional in vice counties 67 and 68, occurring in woods, hedges, moors and rocky ravines. In the NNP there are currently 38 records of what are considered to be native aspens with concentrations in the North Tyne valley, Hadrian's Wall crags and around Holystone and Harbottle. See map. Across these locations the species occurs in several broad-leaved woodland types present in the NNP (NVC communities W9, 10, 11). Although not nationally rare, aspen is an important component of these semi-natural woodlands in the NNP, but there is a general feeling amongst conservationists that the species is under-represented in ASNW in the NNP. ASNW are themselves restricted in number and extent within the park and it is considered that any future attempt to regenerate, replant and/or expand such woodlands should include aspen in appropriate locations.

3. Factors Causing Loss or Decline

National trend - unknown

NNP - Although the current population trend is uncertain it is unlikely that the species has disappeared from any former sites recently. However the future of the species in the NNP is not certain because of the following:

3.1 Grazing - although the species regenerates well from suckers, these can be eaten by stock grazing and sheltering in woodlands. The effect this has on the long term regeneration of the species is not known since monitoring has not taken place in the past.

3.2 Longevity - Individual trees do not live as long as other woodland species, so it is possible that while other tree species have persisted in grazed woods as mature specimens, aspen have been lost from these woodlands as older trees have died.

3.3 Lack of woodland management - Aspen were likely to have thrived better in managed woodlands when other species were taken out for their timber. With the decline in woodland management and the need for timber the canopies of many woods have closed with few clearings shading all but the dominant trees (most often oak in the NNP).

4. Current and Recent Action

- 4.1 Broadleaved woodland survey (1985) recorded the location of 15 woods containing aspen. These records are on the HabPro database and are included in the 38 native mapped sites. All known sites in the NNP are currently recorded on the HabPro database. See appendix 1 and distribution map.
- 4.2 Seven woodlands containing aspen have been entered into formal Section 39 woodland management agreements. One other woodland (Evistones) has an informal management agreement. The Tipalt Burn/ Thirlwall site is included in land leased by NNPA for 99 years. The Cawfields crags site is within a Hadrian's Wall S39 management agreement. Most of the agreement woodlands have been fenced to exclude stock, and in some cases deer. This may have helped some aspen to regenerate, but little or no monitoring has been put in place to determine whether this is the case and if so, to what extent.
- 4.3 Ten amenity tree planting schemes in the NNP have included aspen in 12 areas (approximately 300 trees since 1990). See appendix 2 and map. All the plants were provided from local nurseries and although local provenance was requested there is nothing in the records to prove this was the case. The one exception is the Walltown planting that used trees from a native site in the NNP (Holystone Burn) provided by the Northumberland Wildlife Trust. In addition five Forestry Commission Challenge schemes within the NNP have included aspen, plus one planting funded by WGS (see appendix 2). The majority of planting has taken place close to native sites.
- 4.4 Seven other locations have been given by G. Swan, but only have 1 km square grid references (see appendix 1).
- 4.5 The NWT has adopted this tree as a focal species.

5. Broad Objectives and Targets

- 5.1 Maintain aspen at all known sites within the NNP.
- 5.2 Increase the number of woods containing aspen through planting with stock of local provenance.
- 5.3 Set up a monitoring system to investigate regeneration success.
- 5.4 Continue to search for, and protect, new aspen sites.
- 5.5 Increase awareness of aspen as a native species and use it to highlight the importance of ASNW in the NNP.

6. Proposed Action

6.1 Policy and Legislation

No action proposed

6.2 Site safeguard and management

Action	Target	Partners	Achieving Objective
6.2.1 Ensure all fencing is well maintained around new and existing S39 woodlands and ensure that all areas of aspen are included in fencing scheme.	check annually	landowners	1

6.2.2 Attempt to enter other known (and newly discovered) aspen woodlands into formal S39 (or other) agreements and fence as soon as possible.	A total of 10 woods by 2005	Landowners, NWT, EN	1,4
6.2.3 Ensure that agreement woodlands containing aspen have current management plans considering the species in management decisions and including monitoring prescriptions.	all by end of 2002	FC	1
6.2.4 Give a high priority for grant aid to aspen woodlands not suitable for S39 agreements.	When issues arise	FC, EN	1,4
6.2.5 Consider management prescriptions for aspens on crags. Assess whether fencing or additional planting would enhance the colony.	2004	NWT, EN, FE	1,4

6.3 Species management and protection

Action	Target	Partners	Achieving Objective
6.3.1 Liaise with a local tree nursery or help NWT develop the rare tree nursery and come to an arrangement about growing on local material.	Initiate by 2001	Nurseries, NWT, Uni	1,2
6.3.2 Continue to plant aspen in small-scale tree planting and New Native Woodland Schemes, reserves etc. where appropriate (NVC types W9, 10, 11, 16).	double the no. of stations by 2011	FC, FE, NWT, EN, MOD	1,2
6.3.3 Ensure that all new plantings are of stock of local provenance.	2001 onwards	ALL	1,2
6.3.4 Ensure that all new plantings are protected from domestic and wild herbivores and that the protection is checked regularly.	Check annually	FC, FE, NWT, EN	1,2,4

6.4 Advisory

Action	Target	Partners	Achieving Objective
6.4.1 Continue to advise landowners of the importance of semi-natural broadleaved woodland (especially those containing aspen) in the NNP landscape, and suggest methods and grant aid to protect those in their ownership or management.	Ongoing. Target SSSI, SNCIs etc.	FE, EN, NWT	1,4,5

6.5 Future Research and Monitoring

Action	Target	Partners	Achieving Objective
6.5.1 Set up regular monitoring in aspen woodlands to investigate regeneration. Include in all	5 yearly	FE, EN, NWT	1,3

management plans.			
6.5.2 Ensure that when woodlands are visited the presence of aspen at previously unrecorded sites is recorded on a central database.	ongoing	ALL	1,4
6.5.3 Investigate the best way to collect and grow on genetic material.	Initiate 2001	Nurseries, NWT, EN	1-3
6.5.4 Carry out a survey of crags in the NNP for aspen.	by 2003	Volunteers, students, FE NWT, EN	1,4
6.5.5 Survey 1 km square references given by G. Swan to check the records and pin-point the location of aspen.	2002	Volunteers, students.	1,4
6.5.6 Obtain records from other partners about the locations of planted aspen.	2002	MOD, FC, NWT	1,2

6.6 Communications and Publicity

Action	Target	Partners	Achieving Objective
6.6.1 Include aspen as a key BAP species when writing articles and talks about semi-natural woodlands in the NNP.	1 per year	FE, NWT, EN	5
6.6.2 Mention aspen when leading guided walks at appropriate sites and indicate their importance in the NNP. Include in village walk schemes and involve local people. Use when celebrating ASNW.	Dedicated year of ASNW by 2005	Event leaders, NWT	5
6.6.3 Ensure that all NNP staff and other partners who are out in the Park report the presence of aspen.	2001 onwards	ALL	4,5

7. References

Haffey, D (1985). *A Classification and Evaluation of Broadleaved Woodlands in the Northumberland National Park*. NCC

Rackham, O (1990). *The Complete History of Trees and Woodlands in the British Countryside*. Revised Edition. Phoenix.

Swan (1993). *The Flora of Northumberland*. Northumberland Natural History Society.

Swan (2001). Personal communication of records - letter.

Appendix 1 Native Aspen Sites in NNP

Site	Grid Ref.	Date	Additional Information
Wilkwood Burn wood	NT874034	1992	AS3W46
Linbrigg	NT894068	1992	SSSI
Bizzel crags	NT898220	1987	J.Steele needs checking, crags
Dunsdale Crags	NT897234	1970	G Swan & J. Steele, crags
Pawston Lake	NT855315	1992	SNCI, S3W3
Pawston Lake Wood	NT850315	1985	S3W3
Lightpipe Wood	NT937043	1992	S3W50
Holystone Common	NT944018	1992	SSSI, SNCI
Holystone Burn West	NT946018	1977	SSSI, AS3W55
Dovecrag Burn	NT940024	1993	SNCI, AS3W54
Holystone Burn East	NT950021	1985	SSSI, AS3W55
Dueshill Wood	NT967015	1992	SNCI, AS3W59
Tipalt Burn (Thirlwall Castle)	NY664666	1976	SSSI, AS3W128, NNP lease until 2098
Cawfield Crags	NY718668	1992	S39, crags
Cawfields Crags area	NY720667	1980	Same record as above?
Steel Rigg	NY758676	1980	crags
Bonnyrigg Hall	NY759691	1992	S3W132, Plantation
Fore Plantation	NY761687	1992	SSSI, S3W133, S39, fenced
High Yarrow Wood	NY714874	1992	S3W125
Rough Cleugh	NY750867	1976	S3W121, S39, fenced
Christmas Wood	NY778848	1992	S3W117
West Greystead Wood	NY770858	1992	S3W116
Marlpot Wood	NY787886	1992	AS3W110, s39, fenced, regen
Redheugh Birch & Willow	NY786885	1992	SNCI, S39, fenced
Dunstead Scar Wood	NY781887	1992	S3W112, s39, fenced
High Carrith Wood	NY794843	1985	AS3W104 & on verge
Tarret burn	NY792881	2001	noted by SP, not fenced
Sneep Wood	NY795883	1992	S3W109
Sewingshields Crags	NY800700	1980	crags
N of Sewingshields crags	NY808709	1980	crags
Low Carrith Wood	NY801832	1992	AS3W103, SNCI, s39 fenced, regen
R Tyne Hesleyside	NY811846	1993	SNCI
Sundaysight Cleugh	NY816893	1992	AS3W105, SNCI, S39, fenced
Hothill Wood	NY867851	1992	AS3W88
Lisle Cleugh	NY866855	1992	AS3W87
Evistones Wood	NY836968	1992	AS3W68, Informal, fenced?
Durtrees Burn Wood	NY867968	1992	AS3W, SNCI
Denehead Wood	NY892956	1992	AS3W64
Dover Crags (S of)	NY954958	1992	
1 km square records	NY6570	1970	R. Irthing. G. Swan
	NY7585	1970	Nr Stokoe Crags? G. Swan
	NY8075	1970	Warks Burn. G. Swan
	NY8080	1970	G. Swan
	NY8585	1970	G. Swan

	NY9595	1970	Billsmoor Park? G. Swan
	NZ0095	1987	G. Swan

Appendix 2. Sites with Planted Aspen in NNP.

Site	Approx. Grid Ref.	Year	No. planted (or % in NVC type)	Type of Scheme
Swindon	NY974997	91/92	13	ATPS
The Birks	NY781848	94/95	50	ATPS
Crag End	NY796863	94/95	50	ATPS
Milecastle Inn	NY716660	94/95	2	ATPS
Donkleywood	NY745868 / NY747870	95/96	50/20	ATPS
Ryehill	NT021013 / NT018008	97/98	30	ATPS
Wadge Head	NY795851	98/99	15	ATPS
The Lampert	NY691748	98/99	10	ATPS
Hareshaw House	NY836873	98/99	30	ATPS
Walltown	NY670660	?	?	ATPS
Ramshaugh	NT925054	1998	12% of W11	Challenge
Kilham I	NT887310	1999	2% of W11	Challenge
Ramshope	NT735038	1999	2% of W11	Challenge
Ewehill	NT999164	2000	1.5% of W9	WGS + NPA
Dueshill	NT952009	2001	2% of W11	Challenge
Thompson's Walls	NT868305	2000	3% of W11	WGS
Thirlwall	NY664666	2001	2.5% of W11	In lease area, WGS funding

Aspen Locations in the NNP



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