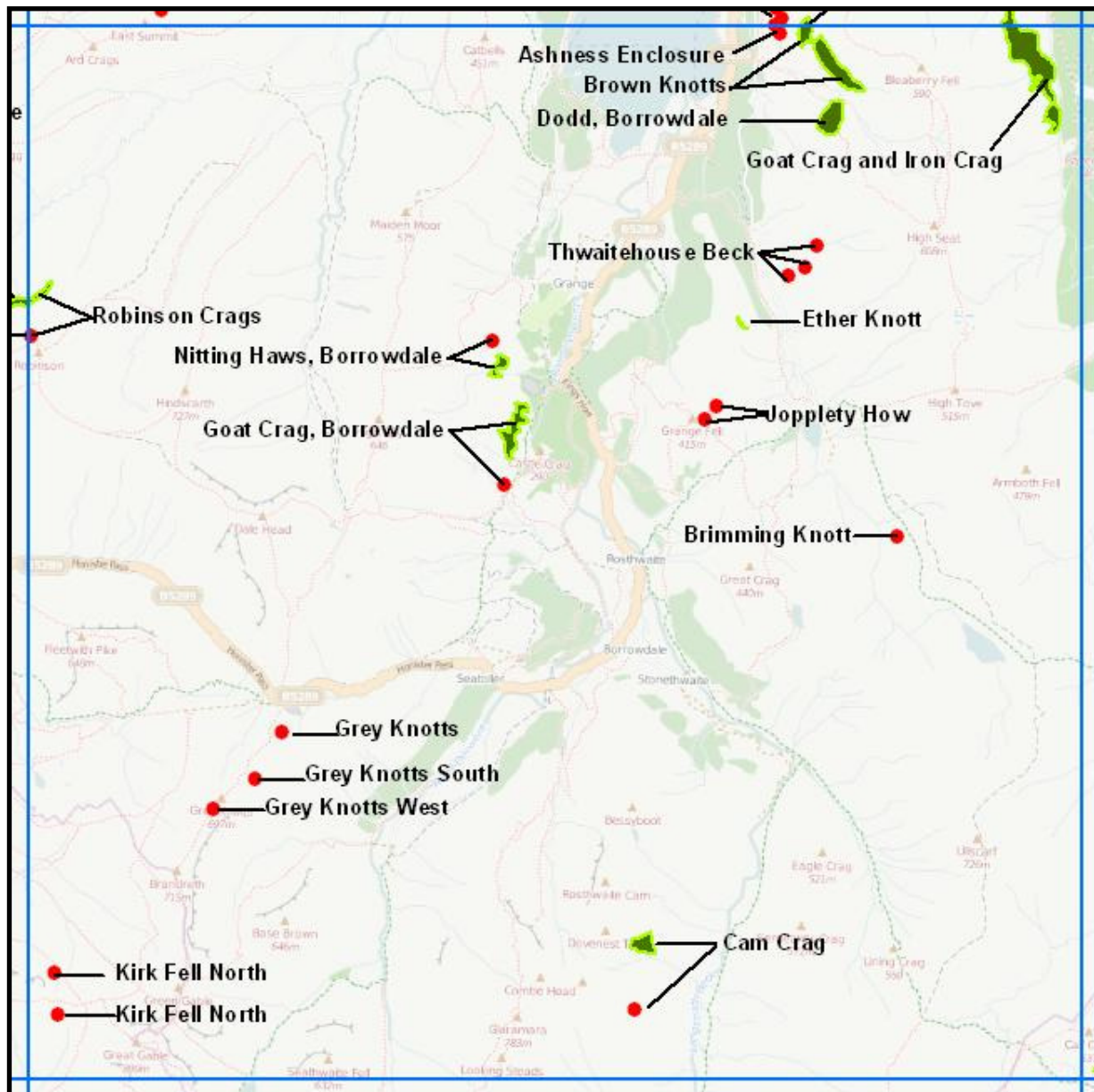


NY21



Sites List:

Jun-NY1917-02	Robinson Crags	Jun-NY2719-01	Brown Knotts
Jun-NY2010-01	Kirk Fell South	Jun-NY2719-02	Dodd, Borrowdale
Jun-NY2011-01	Kirk Fell North	Jun-NY2720-01	Ashness Enclosure
Jun-NY2112-01	Grey Knotts West	Jun-NY2815-01	Brimming Knott
Jun-NY2212-01	Grey Knotts South	Jun-NY2919-01	Goat Crag and Iron Crag
Jun-NY2213-01	Grey Knotts		
Jun-NY2416-01	Goat Crag, Borrowdale		
Jun-NY2416-02	Nitting Haws, Borrowdale		
Jun-NY2511-01	Cam Crag		
Jun-NY2616-01	Jopplety How		
Jun-NY2617-01	Ether Knott		
Jun-NY2717-01	Thwaitehouse Beck		



Uplands for Juniper Project – Survey Form

1. Site details

Site Name: GOAT CRAG	Equiv. L. Ward site (s):
Site Ref. Code: Jun-NY2416-01	Survey date: 09/01/2012
Recorder name (s): MD	Cent. grid ref: NY24610 - 16200
Valley / area: BORROWDALE	Altitude: 190 – 400m
Aspect: E	Ownership:

2. Stand area:

- a) Have you changed the boundaries of the stand on the survey map?
- b) GPS number and track name / label? **GAOT CRAG 5**
- c) Area of sub stands and total area?

Sub stand	A									Total
Area	5.44									5.44
Confidence	3									3

3. Plant numbers and Juniper sub-species?

Ssp COMM

Sub stand	A	B								Total
Count	700	14								714
Method	VP	VP								VP
Confidence	M	H								M

4. Dominant Vegetation ...ACID GRASSLAND....

Other vegetation types present:

acid grassland	wet grassland / rushes
dry heath	wet heath / mire
Limestone grassland	Bracken
Scree	Outcrop / cliff
Limestone scree	Limestone outcrop / cliff

5. Grazing / browsing (circle appropriate grazing animal)?

Sheep Cattle **Red Deer?** Other

Indicators of high grazing / browsing pressure?

Juniper showing past browsing with 1 mature tree cropped to a small lollipop 20cm high. However, young trees & seedlings doing well close by. Calluna & Erica browsed to carpets where sheep can access them – sheep present in January.

6. Other threats:

7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
Y	Y	Y	Y		
Comments:					

Are fruit bearing trees present? Yes / no

8. Fixed point photography: Insert Grid reference and compass bearing fixed point photos.

Photo label / Number	Grid Ref.	Comp. bearing	Magnification	Description of fixed point
Jun-NY2415-01 A	24854 15972	270 deg		Overview south

9. Comments (associated flora and fauna, survey / access difficulties?):

Yew, Birch, Holly, Ash, Hawthorn & Larch present.

Access difficult.



Uplands for Juniper Project – Survey Form

1. Site details

Site Name: Nitting Haws	Equiv. L. Ward site (s): None
Site Ref. Code: NY2416-02	Survey date: 09/01/2012
Recorder name (s): Mike Douglas	Cent. grid ref: NY 24480 16780
Valley / area: Borrowdale	Altitude: 240 – 350m.
Aspect: 90 degrees	Ownership: ?

2. Stand area:

- b) Have you changed the boundaries of the stand on the survey map?
N / A
- d) GPS number and track name / label?
N / A
- e) Area of sub stands and total area?

Sub stand	A	B								Total
Area	1.87	N/A								1.87ha
Confidence	3									3

3. Plant numbers and Juniper sub-species?

Ssp...comm...

Sub stand	A	B								Total
Count	470	35								505
Method	VP	VP								VP
Confidence	M	M								M

4. Dominant Vegetation ...acid grassland.....

Other vegetation types present:

acid grassland	wet grassland / rushes
<u>dry heath</u>	wet heath / mire
Limestone grassland	<u>Bracken</u>
<u>Scree</u>	<u>Outcrop / cliff</u>
Limestone scree	Limestone outcrop / cliff

5. Grazing / browsing (circle appropriate grazing animal)?

Sheep Cattle Red Deer Other

Indicators of high grazing / browsing pressure?

Lower slopes dominated by Nardus in some areas and both Herdwick and Swaledale sheep present in January. Browsing of last year's juniper shoots hard to find but frequent evidence of previous browsing back to woody material. Found one bark stripped stem and one bush lightly browsed by red deer.

6. Other threats:

7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	present	present	present		Present
Comments: Seedlings not difficult to find around N side of stand.					

Are fruit bearing trees present? Yes / no

8. Fixed point photography: Insert Grid reference and compass bearing fixed point photos.

Photo label / Number	Grid Ref.	Comp. bearing	Magnification	Description of fixed point
Jun-NY2416-02A	NY24678 16836	264 degrees		Overview of stand from knoll to the east.
Jun-NY2416-02B	NY24737 16395	322 degrees		Overview from Goat Crag
Jun-NY2416-02C				Juniper in foreground with upper Borrowdale valley in the background.

9. Comments (associated flora and fauna, survey / access difficulties?):

Associated trees – ash, rowan, holly, yew and birch.

Grazing impacts much lower along high altitude boundary with DSH dominating the upper slopes.



Uplands for Juniper Project – Survey Form

1. Site details

Site Name: Goat Crag and Iron Crag	Equiv. L. Ward site (s): None
Site Ref. code: Jun-NY2919-01	Survey date: 27/02/2013
Recorder name (s): M. Douglas	Cent. grid ref: NY2960 1960
Valley / area: Thirlmere	Altitude: 280m – 500m
Aspect: 80 degrees	Ownership:

2. Stand area:

- c) Have you changed the boundaries of the stand on the survey map?
N / A
- f) GPS number and track name / label?
N / A
- g) Area of sub stands and total area?

Sub stand	A									Total
Area	19.91									19.91
Confidence	3									3

3. Plant numbers and Juniper sub-species?

Ssp...J.c.comm

Sub stand	A									Total
Count	964									964
Method	VP									VP
Confidence	M									M

4. Dominant Vegetation / habitat ...outcrop.....

Other habitats / vegetation types present:

<u>acid grassland</u>	wet grassland / rushes
<u>dry heath</u>	wet heath / mire
Limestone grassland	Bracken
<u>Scree</u>	Outcrop / cliff
Limestone scree	Limestone outcrop / cliff
Woodland	

5. Grazing / browsing (circle appropriate grazing animal)?

Sheep Cattle Red Deer Other

Indicators of high grazing / browsing pressure?

Browsed juniper easy to find on lower slopes and below main crag, with 100% of shoots sheep-browsed on some bushes. DSH is restricted to crags here and Deschampsia cespitosa is grazed back hard in some cases. Higher up grazing is lighter and although some Calluna vulgaris is browsed to cushion form at the crag

top, some young junipers have got away within the last ten years. Light red deer browsing was found on one bush at the south end of Iron Crag.

6. Other threats:

7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	present	present	present	X	X
Comments: Dominated by old trees but close inspection not possible for most bushes. Regeneration hotspot at NY2956 1950, where there were 6 seedlings and 5 young trees.					

Are fruit bearing trees present? Yes / no

8. Fixed point photography: Insert Grid reference and compass bearing fixed point photos.

Photo label / Number	Grid Ref.	Comp. bearing	Magnification	Description of fixed point
Jun-NY2919-01A	NY29654 19421	284 degrees		View of dense juniper above gully, Iron Crag
Ju-NY2919-01B	NY29753 20007	250 degrees		Looking up at lower slopes of Goat Crag

9. Comments (associated flora and fauna, survey / access difficulties?):

Juniper largely restricted to crags where other tree species such as larch, ash, rowan, willow spp, hazel, holly and birch are numerous and there are also a few individuals of Scot's pine, oak and aspen. Aspen locations are shown below:

- NY 29399 19950 13 stems.
- NY 29304 19926 4 stems
- NY 29538 19504 1 stem

A few juniper are regenerating around the margins of the stand but the numbers of young and seedling bushes seen are insufficient to maintain the population in the long term.

A red fox (dog) was disturbed from the crags and *Racomitrium ericoides* found on the scree below Goat Crag.

A large patch of bearberry was identified at NY 29327 19787 and four more patches were found on the base of the crags as far north as NY29304 19926.

