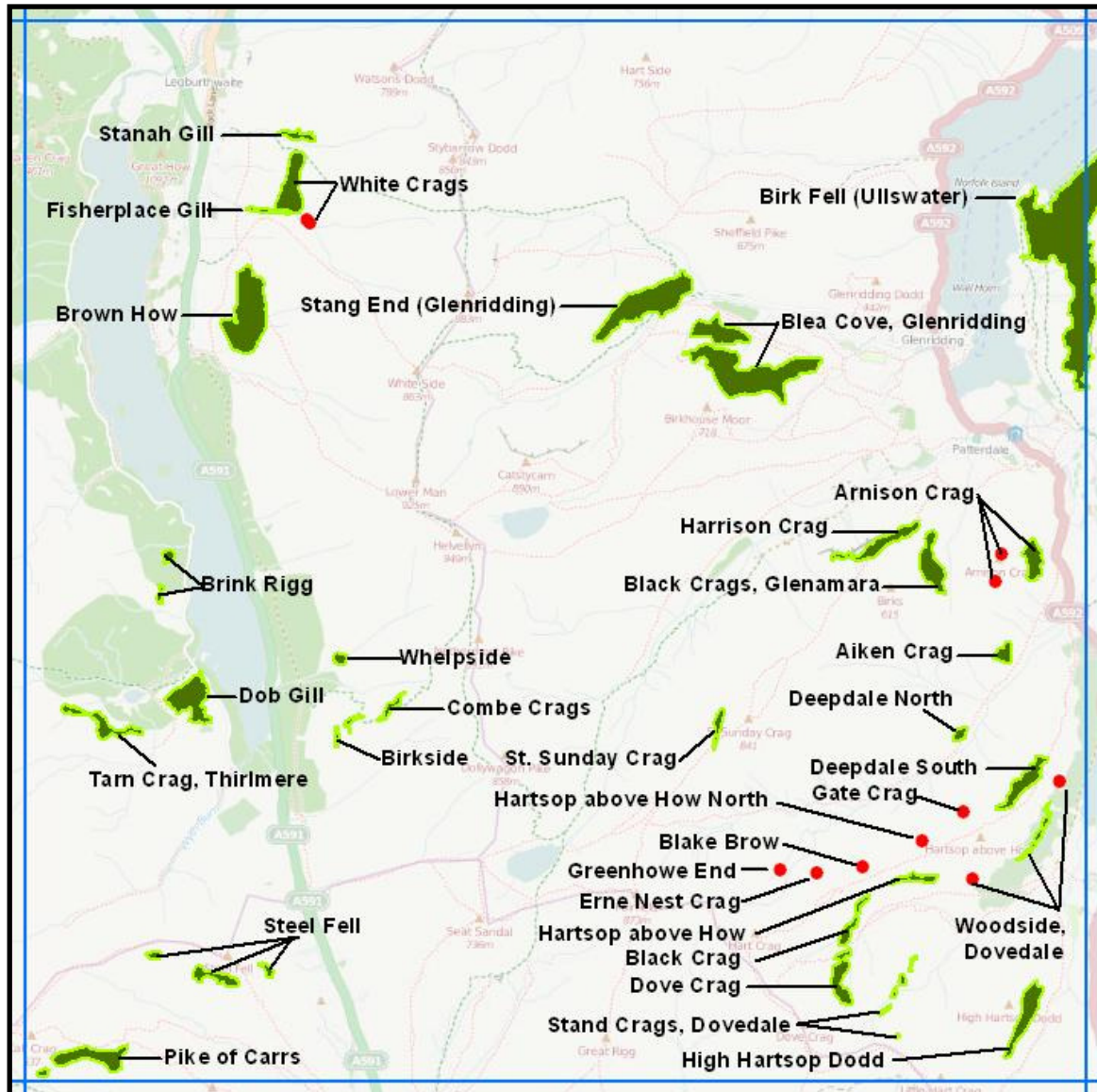


# NY31



## Sites List:

Jun-NY3010-01	Pike of Carrs	Jun-NY3711-01	Black Crag
Jun-NY3013-01	Tarn Crag, Thirlmere	Jun-NY3711-02	Erne Nest Crag
Jun-NY3110-01	Steel Fell	Jun-NY3712-01	Greenhowe End
Jun-NY3113-01	Dob Gill	Jun-NY3712-02	Blake Brow
Jun-NY3114-01	Bank Crag	Jun-NY3810-01	Stand Crag, Dovedale
Jun-NY3114-02	Brink Rigg	Jun-NY3811-01	Hartsop above How
Jun-NY3213-01	Whelpside	Jun-NY3812-01	Hartsop above How North
Jun-NY3213-02	Birkside	Jun-NY3812-02	Gate Crag
Jun-NY3217-01	Brown How	Jun-NY3813-01	Deepdale North
Jun-NY3218-01	Fisherplace Gill	Jun-NY3814-01	Black Crag, Glenamara
Jun-NY3218-02	White Crag	Jun-NY3815-01	Harrison Crag
Jun-NY3218-03	Stanah Gill	Jun-NY3910-01	High Hartsop Dodd
Jun-NY3313-01	Combe Crag	Jun-NY3912-01	Woodside, Dovedale
Jun-NY3517-01	Stang End (Glenridding)	Jun-NY3912-02	Deepdale South
Jun-NY3613-01	St. Sunday Crag	Jun-NY3914-01	Aiken Crag
Jun-NY3616-01	Blea Cove, Glenridding	Jun-NY3914-02	Arnison Crag
Jun-NY3710-01	Dove Crag	Jun-NY3918-01	Birk Fell (Ullswater)

**Uplands for Juniper Project – Survey Form**



**1. Site details**

Site Name: Pike of Carrs	Equiv. L. Ward site (s): None
Site Ref. code: Jun-NY3010-01	Survey date: 16/06/2013
Recorder name (s): D. Benham and E. King	Cent. grid ref: NY 3060 1027
Valley / area: Grasmere / Easedale	Altitude: 300m – 490m
Aspect: 180	Ownership:

**2. Stand area:**

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

Sub stand	A	B								<b>Total</b>
Area										9.61 ha
Confidence	5	5								5

**3. Plant numbers and Juniper sub-species?**

**Ssp...*J.c.comm* .....**

Sub stand	A	B								<b>Total</b>
Count	50	360								410
Method	VP	VP								VP
Confidence	M	M								M

**4. Dominant Vegetation ...Acid grassland.....**

**Other habitats / 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 |
| Woodland            |                           |

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

Sheep                      Cattle                      Red Deer                      Other .....

**Indicators of high grazing / browsing pressure?**

Accessible junipers have been repeatedly browsed by sheep to topiary forms

**6. Other threats:**

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
X	1%	50%	45%	?	4%
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-NY3010-01A	NY30609 10121	NNW		West end of stand
Jun-NY3010-01	NY306 101	S		Old, browsed juniper/

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

Mostly old and mature juniper amongst grasses, heather and a few other small trees.



**Uplands for Juniper Project – Survey Form**

**1. Site details**

Site Name: Tarn Crag, Thirlmere	Equiv. L. Ward site (s): None
Site Ref. Code: Jun-NY3013-01	Survey date: 21/03/2012
Recorder name (s): M. Douglas	Cent. grid ref: NY 30740 13370
Valley / area: Thirlmere	Altitude: 350 – 500m
Aspect: 45 degrees	Ownership:

**2. Stand area:**

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

Sub stand	1									<b>Total</b>
Area	5.73									5.73
Confidence	4									4

**3. Plant numbers and Juniper sub-species?**

**Ssp...comm.....**

Sub stand	1									<b>Total</b>
Count	590									590
Method	VP photo									VP photo
Confidence	M									M

**4. Dominant Vegetation ...Acid grassland.....**

**Other vegetation types present:**

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

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

Sheep                      Cattle                      Red Deer                      Other .....

**Indicators of high grazing / browsing pressure?**

*Nardus stricta* dominates large areas of grassland, and where present DSH is grazed back hard. Few signs of browsing on established juniper but it is largely confined to relatively inaccessible cliffs.

**6. Other threats:** Potential for invasion of conifers from nearby forestry – 2 sitka spruce found amongst juniper.

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	present	present	present	none	Present
Comments: > 80% old and only two seedlings found.					

**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-NY3013-01A	NY31516 13460	260 degrees		
Jun-NY3013-01	NY 30752 13240	341 degrees		

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

Scattered stand of juniper spread across a series of crags, largely limited to relatively inaccessible cliffs. Associated birch, rowan, holly, oak and Scot's pine. Two Sitka spruce also present.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Steel Fell	Equiv. L. Ward site (s): Steel Fell
Site Ref. code: Jun-NY3110-01	Survey date: 26/06/2013
Recorder name (s): D. Benham and E. King	Cent. grid ref: NY 31790 11000
Valley / area: Grasmere	Altitude: 370m – 500m
Aspect: Shoots 170, Blakerigg 190, Ash Crag 90	Ownership:

### 2. Stand area:

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

Sub stand	A	B	C							Total
Area										5.21ha
Confidence	4	4	4							4

### 3. Plant numbers and Juniper sub-species?

**Ssp...*J.c.comm* .....**

Sub stand	A	B	C							Total
Count	50	400	80							530
Method	VP	VP	VP							VP
Confidence	M	M	M							M

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

#### Other habitats / vegetation types present:

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

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

Sheep                      Cattle                      Red Deer                      Other .....

#### Indicators of high grazing / browsing pressure?

Juniper browsed where accessible and topiary growth forms and browse lining recorded at Ash Crag (MD).

### 6. Other threats:

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
X	X	30%	60%	7%	3%
Comments: Not accessed closely to see berries.					

**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-NY3110-01A	NY30402 10782	E		Blakerigg Crag
Jun-NY3110-01B				Heavily browsed juniper at Ash Crag
Jun-NY3110-01C				Browse lined juniper at Ash Crag

**9. Comments (associated flora and fauna, survey / access difficulties?):**  
**Most of the juniper on relatively inaccessible slopes, but heavily browsed where sheep gain access. Numerous hawthorns present.**  
**Sub-stand A = Shoots Crag, B= Blakerigg and C= Ash Crag.**



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Wythburn Dob Gill	Equiv. L. Ward site (s): Wythburn Dob Gill
Site Ref. Code: Jun-NY3113-01	Survey date: 15 October 2011
Recorder name (s): Pete & Barbara Nelson	Cent. grid ref: NY 315 136
Valley / area: Thirlmere	Altitude: 190m to 350m
Aspect: NE	Ownership:

### 2. Stand area:

- d) Have you changed the boundaries of the stand on the survey map? Yes
- h) GPS number and track name / label? Dob Gill juniper track.gpx
- i) Area of sub stands and total area?

Sub stand	1									<b>Total</b>
Area	10.9									10.9
Confidence	5									5

### 3. Plant numbers and Juniper sub-species?

Ssp.....

Sub stand	1									<b>Total</b>
Count	2172									2172
Method	VP photo									<b>VP photo</b>
Confidence	M									<b>M</b>

**4. Dominant Vegetation** Juniper, on about 70% of the stand. Bracken and rough grassland elsewhere

#### Other vegetation types present:

<u>acid grassland</u>	<u>wet grassland / rushes</u>
dry heath	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?

A few trees show a browse line. Short cropped grass sometimes *Nardus stricta* dominated and along with trampled bracken and grazed *Deschampsia cespitosa* and *Juncus effusus*, suggest that this area is moderately to heavily winter grazed.

### 6. Other land management affecting juniper?



Some mature conifers have been felled on the lower slopes, to the benefit of the juniper

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
<1%	5%	15%	80%	-	1%
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
Dob Gill Composite 1	NY 31543 13533	approx N to NE		From near the summit of Birk Crag
Dob Gill Composite 2	NY 31681 13517	approx N to NE		A spur at about 240m
Jun-NY3113-01B	NY32950 13810	260 degrees		From across the Lake at Juniper Planting site (Combe Gill)

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

At least one third of the stand is very dense. The remainder varies from dense to thinly scattered. The size of the stand and its variability makes it difficult to estimate the number of individual trees.

Visit and fixed point photograph by M. Douglas on 21/03/2012 lead to a revision of the count and an addition to the grazing impact section.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Bank Craggs, Thirlmere	Equiv. L. Ward site (s): None
Site Ref. code: Jun-NY3114-01	Survey date: 20/08/2013
Recorder name (s): M. Douglas	Cent. grid ref: NY3128 1459
Valley / area: Thirlmere	Altitude: 300m – 370m
Aspect: 90 degrees	Ownership:

### 2. Stand area:

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

Sub stand	A									<b>Total</b>
Area	0.65									0.65ha
Confidence	5									5

### 3. Plant numbers and Juniper sub-species?

Ssp...*J.c.comm* .....

Sub stand	A									<b>Total</b>
Count	112									112
Method	WT									WT
Confidence	H									H

### 4. Dominant Vegetation ...Bracken.....

#### Other habitats / vegetation types present:

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

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

Sheep                      Cattle                      Red Deer                      Other .....

#### Indicators of high grazing / browsing pressure?

Most juniper are heavily browsed. The extent, depth and height of browsing suggests that red deer are the main culprit. I was told that sheep regularly find their way into this area, and they may also contribute to the heavy browsing.

**6. Other threats:** Two mature sycamore are present upslope and these could regenerate well given if grazing pressure is reduced. The same could be said for nearby larch and spruce.

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	X	present	>85%	X	present
Comments: 6 seedlings found around NY 31296 14623					

**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-NY3114-01A				Heavily browsed old juniper
Jun-NY3114-01B				Juniper damaged by browsing and thrashing.

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

Holly, yew, larch and sycamore present. Juniper look to have been heavily browsed over many years and a reduction in red deer browsing pressure maybe required for juniper seedlings to become established.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Birkside	Equiv. L. Ward site (s): None
Site Ref. code: Jun-NY3213-02	Survey date: 20/08/2013
Recorder name (s): M. Douglas	Cent. grid ref: NY 3304 1338
Valley / area: Thirlmere	Altitude: 400m – 530m
Aspect: 270 degrees	Ownership:

### 2. Stand area:

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

Sub stand	A									<b>Total</b>
Area	1.39									1.39ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...J.c.comm .....

Sub stand	A									<b>Total</b>
Count	440									440
Method	WT									WT
Confidence	M									M

### 4. Dominant Vegetation ...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?

All accessible bushes very heavily browsed, with some recent browsing of juniper as well as heavy winter browsing. Extreme suppression of growth illustrates that this has been long term. Browse lines suggest sheep are the main grazing animal.

### 6. Other threats:

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
X	present	present	present	present	present
Comments: Almost all old or mature with just two young bushes found.					

**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-NY3213-02A				Sheep browsed juniper.
Jun-NY3213-02B				Suppressed, sheep browsed junipers.

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

Very heavily browsed juniper stand.

## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Brown How, Thirlmere	Equiv. L. Ward site (s): Thirlspot
Site Ref. code: Jun-NY3217-01	Survey date: 28/05/2012
Recorder name (s): R. Ansell Davies and A. Watt	Cent. grid ref: NY3210 1720
Valley / area: Thirlmere	Altitude: 240m – 460m
Aspect: 270 degrees	Ownership:

### 2. Stand area:

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

Sub stand	A									<b>Total</b>
Area	21.9									21.90ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp... J.c.comm.....

Sub stand	A									<b>Total</b>
Count	1291									1291
Method	VP									VP
Confidence	H									H

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

#### Other habitats / vegetation types present:

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

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

Sheep                      Cattle                      Red Deer                      Other .....

### Indicators of high grazing / browsing pressure?

Hawthorns very stunted due to grazing. Very few young juniper.

### 6. Other threats:

### 7. Juniper age:

Estimate Percentage
---------------------

seedling	young	mature	old	Ill	Dead
<1%	<5%	40%	45%	5%	8%
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-NY3217-01A	NY31961 16914	45 degrees		
Jun-NY3217-01B	NY 31926 17913	340 degrees		
Jun-NY3217-01C	NY 31996 17158	90 degrees		

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

Holly, ash, birch, hawthorn, rowan, larch and yew present. Saw or heard meadow pipit, willow warbler, wren, chaffinch, grey wagtail, cuckoo, raven and skylark. Also green veined white, small heath and orange tip butterflies.

The total number of bushes includes a number of outliers at the northern and western edge of the stand, comprising 33 juniper.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Fisher Gill	Equiv. L. Ward site (s): Stybeck Farm Nr
Site Ref. code: Jun-NY3218-01	Survey date: 29/04/2012
Recorder name (s): Ruth Ansell-Davies and Annette Watt	Cent. grid ref: NY3231 1821
Valley / area: Thirlmere	Altitude: 270m – 470m
Aspect: 275 degrees	Ownership:

### 2. Stand area:

- h) Have you changed the boundaries of the stand on the survey map?  
Yes
- p) GPS number and track name / label?  
N / A
- q) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	1.15									1.15ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...J.c.comm .....

Sub stand	A									<b>Total</b>
Count	282									282
Method	VP									VP
Confidence	H									H

### 4. Dominant Vegetation ...Outcrop.....

#### Other habitats / vegetation types present:

<u>acid grassland</u>	wet grassland / rushes
<u>dry heath</u>	<u>wet heath / mire</u>
Limestone grassland	<u>Bracken</u>
<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?

Most juniper growing on inaccessible crags.

### 6. Other threats: 40% of bushes showing some rusted foliage.

### 7. Juniper age:



Estimate Percentage					
seedling	young	mature	old	Ill	Dead
X	present	present	present	present	present
Comments: 40% of bushes showing some rusted foliage.					

**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-NY3218-01A	NY32353 18204	70 degrees		
Jun-NY3218-01B	NY32273 18199	300 degrees		Showing deep gill habitat of this stand.
Jun-NY3218-01C	NY32273 18199	50 degrees		Numerous bushes with rusted foliage.

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

Holly, ash, rowan and birch present, with wood anemone present in the ground flora, which also included *Alchemilla alpina*, *Alchemilla spp*, saxifrage spp. primroses, *Sedum spp* and butterwort.

Meadow pipit and willow warbler seen.

The large number of juniper with rusted foliage in this stand suggests that it may be infected with *Phytophthora austrocedrae*, though this has yet to be confirmed (MD – Jan 2013).



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: White Craggs	Equiv. L. Ward site (s): None
Site Ref. code: Jun-NY3218-02	Survey date: 12/03/2012
Recorder name (s): Ruth Ansell-Davies and Annette Watt	Cent. grid ref: NY 3250 1841
Valley / area: Thirlmere	Altitude: 410m – 480m
Aspect: 270 degrees.	Ownership:

### 2. Stand area:

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

Sub stand	A									<b>Total</b>
Area	9.55									9.55ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...J.c.comm .....

Sub stand	A									<b>Total</b>
Count	370									
Method	VP									
Confidence	M									

### 4. Dominant Vegetation ...Outcrop.....

#### Other habitats / vegetation types present:

<u>acid grassland</u>	<u>wet grassland / rushes</u>
dry heath	wet heath / mire
Limestone grassland	<u>Bracken</u>
<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?

Most juniper on inaccessible crags

### 6. Other threats: None

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
X	present	present	present	present	Present
Comments: Not closely accessed so accurate assessment not possible.					

**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-NY3218-02A				
Jun-NY3218-02B				
Jun-NY3218-02C				

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

UU have proposals to restore area through planting juniper in enclosures. Yew and Holly also present.



**Uplands for Juniper Project – Survey Form**

**1. Site details**

Site Name: Stanah Gill	Equiv. L. Ward site (s): None
Site Ref. code: Jun-NY3218-03	Survey date: 12/03/2012
Recorder name (s): Ruth Ansell-davies and Annette Watt	Cent. grid ref: NY3256 1892
Valley / area: Thirlmere	Altitude: 320m – 480m
Aspect: 210 degrees	Ownership:

**2. Stand area:**

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

Sub stand	A									<b>Total</b>
Area	2.15									2.15ha
Confidence	3									3

**3. Plant numbers and Juniper sub-species?**

Ssp...J.c.comm .....

Sub stand	A									<b>Total</b>
Count	1330									1330
Method	VP									VP
Confidence	M									M

**4. Dominant Vegetation ...acid grass.....**

**Other habitats / vegetation types present:**

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

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

Sheep                  Cattle                  Red Deer                  Other .....

**Indicators of high grazing / browsing pressure?**

Not assessed

**6. Other threats: None**

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
		present	present	present	present
Comments: Not accessed so proportions in each age class not assessed.					

**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-NY3218-03A	NY32425 18915	60 degrees		
Jun-NY3218-03B	NY32480 18852	80 degrees		
Jun-NY3218-03C	NY32480 18852	40 degrees		

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

Scattered holly, ash, rowan and birch present. Also saw kestrel, raven and buzzard. The survey was completed from the other side of the gill, so some details were not assessed. The (MAPINFO) boundary was drawn using aerial photography – hence the poor confidence rating.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Combe Craggs	Equiv. L. Ward site (s): Birkside Craggs
Site Ref. code: Jun-NY3313-01	Survey date: 20/08/2013
Recorder name (s): M. Douglas	Cent. grid ref: 3346 1355
Valley / area: Thirlmere	Altitude: 530m – 630m
Aspect: 315 degrees	Ownership:

### 2. Stand area:

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

Sub stand	A									<b>Total</b>
Area	1.72									1.72 ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...*J.c.comm* .....

Sub stand	A									<b>Total</b>
Count	131									131
Method	VP									VP
Confidence	L									L

### 4. Dominant Vegetation ...dry heath.....

#### Other habitats / vegetation types present:

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

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

Sheep                      Cattle                      Red Deer                      Other .....

#### Indicators of high grazing / browsing pressure?

Almost all bushes inaccessible to livestock. Slopes around the crags are generally heavily grazed by sheep.

### 6. Other threats: None

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
Comments: Not accessed closely					

**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-NY3313-01A	NY33349 13516	78 degrees		Taken from large boulder to the west of the crags.

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

Scattered bushes growing amongst dense DSH with tall herb ledges. Eared-willow (possible male) at NY 33416 13545.

Tall herb ledges with devil's bit scabious, wood sage, wood geranium, meadowsweet, *Lathyrus linifolius*, golden rod, *Alchemilla alpina*, mountain sorrel, roseroot and cowberry.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Stang End	Equiv. L. Ward site (s): Stang End
Site Code: Jun-NY3517-01	
Recorder name (s): Mike Douglas	Survey date: 2/8/11
	Cent. grid ref: NY 35850 17350
Valley / area: Glenridding, Ullswater	Altitude: 350 – 590m.
Aspect: SE	Ownership:

### 2. Stand area:

- l) Have you changed the boundaries of the stand on the survey map?  
Yes – stand only partially mapped / counted by L. Ward
- x) GPS number and track name / label?  
N / A
- y) Area of sub stands and total area?

Sub stand	A							<b>Total</b>
Area	21ha							21ha

### 3. Plant numbers and Juniper sub-species?

***Ssp communis***

Sub stand	A							<b>Total</b>
Count	5638							5638
Method	VP photo							VP photo
Confidence	M							M

### 4. Dominant vegetation and summary of other vegetation types within and immediately around the stand: Acid grassland

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?

Signs of heavy browsing on juniper in the past, and this sign of historically higher stocking densities is backed up by high density of *Nardus stricta* and *Juncus squarrosus*. In areas where this is the case the sward is now tall (> 10 – 15cm) though, and *J. squarrosus* is being out-competed by neighbouring vegetation. Alongside the recovery of dwarf shrub heath (particularly around the NE of the stand) and the presence of hundreds of juniper seedlings, this suggests a reduction in stocking densities in recent years. Grazing pressure does seem to be greater to the



SW of Rowten Beck, with shorter cropped grassland and less DSH. Many junipers here show severe browsing and bark stripping damage (not recent), but there are also many seedlings along the upper boundary of the stand.

**6. Other land management affecting juniper?** None

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
>10%	10%		>70%	present	present
Comments: Estimated 700 seedlings around the stand after extrapolating up from the numbers seen around the boundary.					

**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
Stang End File, 007	NY 35550 17276	83°		Photo of dense, central portion of stand, taken from upper stand boundary at Rowten Beck, looking towards YH.
Stang End File, 012	NY 35576 16460	10°		Whole stand photo from across valley.
Stang End File, 011	NY 35576 16460	26°		Photo of dense portion of stand to NE of Rowten Beck

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

The L. Ward survey counted only to the east of easting 36 (700 trees).

This is a mature stand with many standard / associated trees including Scot's pine, larch, ash, rowan, holly, sycamore and a stand of 15 aspen at NY 36207 17607. Birds within and around the stand included chaffinch, willow warbler, siskin and spotted flycatcher. Kestrel and buzzard were seen around the stand. Small heath and dark green fritillary butterflies were present.

Difference in grazing pressure around the stand and although juniper seedlings are coming through everywhere, some have been lightly browsed. Fifteen young and seedling juniper on raised rocky ground adjacent to Glenridding Beck had all being browsed, indicating that although sheep stocking density is allowing juniper regeneration at present, numbers may be at a maximum level for continued restoration of the stand.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Blea Cove	Equiv. L. Ward site (s): Blea Cove and Glenridding Moorside
Site Ref. Code: Jun-NY3616-01	Survey date: 22 and 31/08/2011. Re-visited 22/05/2013 – M.D. and O.F.
Recorder name (s): J. and K. Oglesby, H. Simpson	Cent. grid ref: NY367 166
Valley / area: Ullswater	Altitude: 280 – 680m
Aspect: various	Ownership:

### 2. Stand area:

m) Have you changed the boundaries of the stand on the survey map?

Yes

z) GPS number and track name / label?

N / A

aa) Area of sub stands and total area?

Sub stand	A	B								Total
Area										37.31ha
Confidence										4

### 3. Plant numbers and Juniper sub-species?

**Ssp...*J.c.comm...***

Sub stand	A	B								Total
Count	830	4765								5595
Method	VP	VP								VP
Confidence	M	M								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?

22/05/2013: Minority of junipers were lightly browsed, although there was one case of recent bark stripping by sheep. Some *Juncus squarrosus* was lightly to moderately browsed and there was some *Nardus* fragments scattered around on much of the grassland. Nevertheless, *J. squarrosus* rosettes were being encroached upon slightly by surrounding vegetation, suggesting a decline in grazing impacts in recent years.

**6. Other threats:**

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
10%	20%	10%	60%	present	present
Comments: Age classes re-assessed 22/05/2013. See 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-NY3616-01A	NY36640 17527	180 degrees		Overview of Moorside sub-stand
Jun-NY3616-01B	NY36840 16500	300 degrees		Overview of Blea Cove
Jun-NY3616-01C	38010 16950	250 degrees		Overview from across the valley

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

Sub-stand A refers to L. Wards' Glenridding Moorside Site and sub-stand B to the Birkhouse Moor site.

22/05/2013, M. Douglas and O. Fulton:

Few standard trees amongst juniper with very scattered rowan, birch, larch and willow spp.

Found signs of moderate winter grazing but this doesn't seem to be affecting juniper regeneration as we estimated more than 1000 young bushes and more than 500 seedlings were present. A 70m transect heading straight up a slight depression of thin soil and scree, to NY 3650216790, revealed 57 young trees and 25 seedlings. This concentration of young bushes was exceeded further upslope and this situation continued around to the east, with young and mature juniper dominating beneath Nab Craggs and The Nab. Two outlying seedlings (one year old) were found at NY 36445 16184.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Dove Crag	Equiv. L. Ward site (s): Dove Crag
Site Ref. Code: Jun-NY3710-01	Survey date: 27/04/2011
Recorder name (s): M. Douglas	Cent. grid ref: 37670 11000
Valley / area: Dovedale	Altitude: 480m – 680m
Aspect: 80 degrees	Ownership:

### 2. Stand area:

n) Have you changed the boundaries of the stand on the survey map?

Yes

bb) GPS number and track name / label?

N / A

cc) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	5.84									5.84
Confidence	3									3

### 3. Plant numbers and Juniper sub-species?

Ssp...comm.....

Sub stand	A									<b>Total</b>
Count	130									130
Method	VP									VP
Confidence	L									L

### 4. Dominant Vegetation ...dry heath.....

#### Other habitats / vegetation types present:

acid grassland

dry heath

Limestone grassland

Scree

Limestone scree

Woodland

wet grassland / rushes

wet heath / mire

Bracken

Outcrop / cliff

Limestone outcrop / cliff

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

Sheep

Cattle

Red Deer

Other .....

#### Indicators of high grazing / browsing pressure?

Most juniper growing amongst well grown heather and steep slopes + high altitude perhaps limiting grazing pressure.

### 6. Other threats: None

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
?	present	present	present	present	Present
Comments: Difficult to access so not closely inspected.					

**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

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

Occasional rowan. Singing meadow pipit and wheatear + nesting raven.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Black Crag	Equiv. L. Ward site (s): Black Crag
Site Ref. Code: Jun-NY3711-01	Survey date: 27/04/2011
Recorder name (s): M. Douglas	Cent. grid ref: NY37830 511520
Valley / area: Dovedale	Altitude: 480m – 580m
Aspect: 100 degrees	Ownership:

### 2. Stand area:

o) Have you changed the boundaries of the stand on the survey map?

Yes

dd)GPS number and track name / label?

N A

ee)Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	3.21									3.21ha
Confidence	3									3

### 3. Plant numbers and Juniper sub-species?

Ssp...comm.....

Sub stand	A									<b>Total</b>
Count	502									502
Method	VP									VP
Confidence	M									M

### 4. Dominant Vegetation Dry heath.....

#### Other habitats / vegetation types present:

acid grassland

dry heath

Limestone grassland

Scree

Limestone scree

Woodland

wet grassland / rushes

wet heath / mire

Bracken

Outcrop / cliff

Limestone outcrop / cliff

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

Sheep

Cattle

Red Deer

Other .....

### Indicators of high grazing / browsing pressure?

Most junipers on inaccessible crags

### 6. Other threats:

None

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
	present	present	present	present	present
Comments: Impossible to access and assess in detail					

**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-NY3711-01A				Whole stand from Hartsop above How

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

Wet flushes at base of crags with *Lathyrus linifolius*, *Thalictrum minus*, wood cranesbill, devil's bit scabious, roseroot and wood anemone.

Pair of ring ouzel alarming at NY 378 114.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Deepdale North	Equiv. L. Ward site (s): Latterhaw Crag
Site Ref. Code: Jun-NY3813-01	Survey date: 08/11/2011
Recorder name (s):	Cent. grid ref: NY38820 13290
Valley / area: Ullswater	Altitude: 270 – 350m
Aspect: 110 degrees	Ownership:

### 2. Stand area:

p) Have you changed the boundaries of the stand on the survey map?

Yes

ff) GPS number and track name / label?

gg) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	1.25									1.25ha
Confidence	5									5

### 3. Plant numbers and Juniper sub-species?

Ssp...comm

Sub stand	A									<b>Total</b>
Count	254									254
Method	VP									VP
Confidence	H									H

### 4. Dominant Vegetation/ habitat: Acid grass / bracken.....

#### Other vegetation / habitats present:

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

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

Sheep

Cattle

Red Deer

Other .....

### Indicators of high grazing / browsing pressure?

Occasional juniper browsing. Heavy browsing on adjacent holly.

### 6. Other threats:

### 7. Juniper age:



Estimate Percentage					
seedling	young	mature	old	Ill	Dead
4%	3%	45%	45%	present	present
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-NY3813-01A	NY395 134	170 degrees		Overview of stand
Jun-NY3813-01B	NY38943 13398	80 degrees		East end of stand
Jun-NY3813-01C				

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

Hawthorn, birch, rowan and holly present. Recorded stonechat, kestrel, raven and mistle thrush.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Deepdale North	Equiv. L. Ward site (s): Latterhaw Crag
Site Ref. Code: Jun-NY3813-01	Survey date: 08/11/2011
Recorder name (s):	Cent. grid ref: NY38820 13290
Valley / area: Ullswater	Altitude: 270 – 350m
Aspect: 110 degrees	Ownership:

### 2. Stand area:

q) Have you changed the boundaries of the stand on the survey map?

Yes

hh)GPS number and track name / label?

ii) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	1.25									1.25ha
Confidence	5									5

### 3. Plant numbers and Juniper sub-species?

Ssp...comm

Sub stand	A									<b>Total</b>
Count	254									254
Method	VP									VP
Confidence	H									H

### 4. Dominant Vegetation/ habitat: Acid grass / bracken.....

#### Other vegetation / habitats present:

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

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

Sheep

Cattle

Red Deer

Other .....

### Indicators of high grazing / browsing pressure?

Occasional juniper browsing. Heavy browsing on adjacent holly.

### 6. Other threats:

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
4%	3%	45%	45%	present	present
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-NY3813-01A	NY395 134	170 degrees		Overview of stand
Jun-NY3813-01B	NY38943 13398	80 degrees		East end of stand
Jun-NY3813-01C				

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

Hawthorn, birch, rowan and holly present. Recorded stonechat, kestrel, raven and mistle thrush.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Black Crag, Glenamara	Equiv. L. Ward site (s): None
Site Code: Jun-NY3814-01	Survey date: 16/10/2012
Recorder name (s): M. Douglas	Cent. grid ref: NY38550 14870
Valley / area: Ullswater	Altitude: 380 – 550m
Aspect: 85 degrees	Ownership: ?

### 2. Stand area:

r) Have you changed the boundaries of the stand on the survey map?

N / A

jj) GPS number and track name / label?

kk) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	7.81									7.81
Confidence	3									3

### 3. Plant numbers and Juniper sub-species?

Ssp... comm.....

Sub stand	A									<b>Total</b>
Count	216									216
Method	VP									VP
Confidence	M									M

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

#### Other habitats / vegetation types present:

acid grassland

wet grassland / rushes

dry heath

wet heath / mire

Limestone grassland

Bracken

Scree

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?

Few juniper accessed but those that were had been browsed, one recently. 1 seedling was found but this had been browsed back hard. *Alchemilla alpina* and *Deschampsia cespitosa* were grazed.

### 6. Other threats:

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	present	present	present	X	Present
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-NY3814-01A	NY 38923 14839	250 degrees		Whole stand.

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

Lots of birch and rowan on crags, with some holly, hazel, willow (goat and grey), ash and occasional oak. Small aspen clone present with 6 stems at NY 38673 14805.

**Restoration:**

Could use two fence lines between existing wall downslope and steep crags above, to enclose an area below the crags for natural regeneration of juniper and other trees, as well as tall herb and heath vegetation. One upslope from NY 3869 1479 and another up from NY 3873 1462.

This would enclose around 1.6 ha of fell, acting as a demonstration site on the effects of sheep grazing.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Harrison Crag	Equiv. L. Ward site (s): Elmhow Crag
Site Ref. code: Jun-NY3815-01	Survey date: 31/05/2013
Recorder name (s): Janet Ashton	Cent. grid ref: NY3805 1508
Valley / area: Ullswater	Altitude: 330m – 470m
Aspect: 305 degrees	Ownership: ?

### 2. Stand area:

s) Have you changed the boundaries of the stand on the survey map?

Yes

ll) GPS number and track name / label?

N / A

mm) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	7.20									7.20ha
Confidence	2									2

### 3. Plant numbers and Juniper sub-species?

Ssp...*J.c.comm* .....

Sub stand	A									<b>Total</b>
Count	227									227
Method	VP									VP
Confidence	L									L

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

#### Other habitats / vegetation types present:

acid grassland

wet grassland / rushes

dry heath

wet heath / mire

Limestone grassland

Bracken

Scree

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?

Heavily browsed hawthorn, fresh sheep droppings.

### 6. Other threats:

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
	>10%	80%	>5%	X	present
Comments: Not all accessed closely. Young plants and seedlings would have been easy to miss.					

**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-NY3815-01A	NY38178 15181	0 degrees		Looking over Ullswater
Jun-NY3815-01B	NY38178 15181	115 degrees		Looking up the crag.
Jun-NY3815-01C	NY38178 15181			Seedling or young tree in sward.

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

Stated count could be a large underestimate given the difficulties of assessing this stand. Bird cherry, rowan, holly, larch, ash, birch and hawthorn were present. Browsing appears to be light, being difficult to find on the juniper which were accessed.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Woodside, Dovedale	Equiv. L. Ward site (s): None
Site Ref. Code: Jun-NY3912-01	Survey date: 30/11/2011
Recorder name (s): MD	Cent. grid ref: NY 39570 12350
Valley / area: Ullswater	Altitude: 350 – 430 m
Aspect:120	Ownership:

### 2. Stand area:

t) Have you changed the boundaries of the stand on the survey map?

N A

nn)GPS number and track name / label?

oo)Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	2.25									2.25 ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...comm...

Sub stand	<b>A</b>									<b>Total</b>
Count	<b>248</b>									<b>248</b>
Method	<b>Exact</b>									<b>Exact</b>
Confidence	<b>H</b>									<b>H</b>

### 4. Dominant Vegetation ...Bracken.....

#### 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 very heavily browsed, bark stripped and damaged by red deer. Where present amongst grasses, *Calluna* and *Vaccinium myrtillus* moderately to heavily browsed with some intact long shoots and flowering in *Calluna* at present but cushion growth form suggesting winter browsing is a problem. Grasses dominated by *Nardus stricta* at southern end.

**6. Other threats:** Taller trees present up to 420 m altitude (inc sycamore) but these unlikely to be a problem due to heavy impacts from red deer.



**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
none	present	present	>95%	present	>5%
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

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

Deer proof wall and wall-top fence unlikely to be effective due to open access for deer at the SW end of the site. Although it would be expensive to rectify this, the outlay would protect a relatively large area from red deer and make juniper planting possible over more than 20 ha of fell side. Planted juniper would complement the existing woodland on the slope and would help link juniper stands in Dovedale and Deepdale. Two red deer were recorded and a number of Swaledale sheep grazed the fell side and woodland.



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Deepdale South	Equiv. L. Ward site (s): Cockley How
Site Ref. Code: Jun-NY3912-02	Survey date: 18/11/2011
Recorder name (s): R. Ansell-Davies, A. Watt	Cent. grid ref: NY39410 12830
Valley / area: Ulswater	Altitude: 330 – 450m
Aspect: 315 degrees	Ownership:

### 2. Stand area:

u) Have you changed the boundaries of the stand on the survey map?

Yes

pp)GPS number and track name / label?

qq)Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	6.54									6.54ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...comm

Sub stand	A									<b>Total</b>
Count	2470									2470
Method	VP									VP
Confidence	M									M

### 4. Dominant Vegetation/ habitat ...Acid grassland.....

#### Other vegetation / habitats present:

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

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

Sheep                      Cattle                      Red Deer                      Other .....

#### Indicators of high grazing / browsing pressure?

Some browsing and flaying by red deer. This years growth untouched at present.

### 6. Other threats:

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	33%	33%	33%	present	present
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-NY3912-02A				Top half of stand
Jun-NY3912-02B				Overview of valley
Jun-NY3912-02C				Deer damage

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

Rowan, ash, holly and hawthorn present. Sheep have been off-wintered for 3-4 years. Occasional visits by red deer.

Restoration:

This stand appears to be healthy at present, and continued off-wintering of sheep should result in successful juniper regeneration. Red deer populations should be monitored though, as reductions in sheep numbers may result in red deer using the area more, with associated increases in browsing and bark stripping of juniper.

Photos:

T:\Images\Projects\Wider Countryside\Juniper project\Ullswater juniper\Deepdale South. 012, 016, 017



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Arnison Crag	Equiv. L. Ward site (s): Norman Bank
Site Ref. Code: Jun-NY3914-02	Survey date: 24/10/2011
Recorder name (s): R. Ansell-Davies, A. Watt	Cent. grid ref: NY39520 14920
Valley / area: Ullswater	Altitude: 250 – 420m
Aspect: 90 degrees	Ownership:

### 2. Stand area:

v) Have you changed the boundaries of the stand on the survey map?

Yes

rr) GPS number and track name / label?

ss) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	4.95									4.95ha
Confidence	5									5

### 3. Plant numbers and Juniper sub-species?

Ssp...comm

Sub stand	A	B								<b>Total</b>
Count	2500	20								2520
Method	VP	VP								VP
Confidence	M	H								M

### 4. Dominant Vegetation/ habitat ...Bracken.....

#### Other vegetation / habitats present:

acid grassland

wet grassland / rushes

dry heath

wet heath / mire

Limestone grassland

Bracken

Scree

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?

Juniper not browsed and many seedlings present. DSH short cropped though.

### 6. Other threats:

### 7. Juniper age:

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
10%	20%	40%	30%	present	Present
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-NY3914-02A	From Deepdale Bridge	320 degrees		Stand overview
Jun-NY3914-02B				
Jun-NY3914-02C				

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

Outlier to the west (sub site B) with 20 trees. Raven, kestrel stonechat and pied wagtail present.

Healthy stand with many j. seedlings, holly, hawthorn, yew, birch and ash.

Restoration:

This is a healthy juniper stand with a good mixture of age classes, many seedlings, a good mixture and number of standard trees, and no signs of browsing at present.

Sheep stocking densities / grazing regimes seem to be allowing regeneration, and the main threat to the stand may now be roaming red deer. These should be monitored and actively managed if they start to affect the juniper stand.

Photos:

T:\Images\Projects\Wider Countryside\Juniper project\Ullswater juniper\Arnison Crag. 003 and 062



## Uplands for Juniper Project – Survey Form

### 1. Site details

Site Name: Birk Fell	Equiv. L. Ward site (s): Place Fell Low, Birk, Silver, Bleawick and South
Site Ref. Code: Jun-NY3918-01	Survey date: 14/10/11 and 2/12/11
Recorder name (s): Mike Douglas, Dave Greaves	Cent. grid ref: NY39890 18240
Valley / area: Ullswater	Altitude: 150 – 480m
Aspect: 270 degrees	Ownership:

### 2. Stand area:

w) Have you changed the boundaries of the stand on the survey map?

Yes

tt) GPS number and track name / label?

uu) Area of sub stands and total area?

Sub stand	A									<b>Total</b>
Area	113.9									113.9 ha
Confidence	4									4

### 3. Plant numbers and Juniper sub-species?

Ssp...comm...

Sub stand										<b>Total</b>
Count										
Method										
Confidence										

### 4. Dominant Vegetation/ habitat ...Birch Woodland

#### Other vegetation / habitats present:

acid grassland

wet grassland / rushes

dry heath

wet heath / mire

Limestone grassland

Bracken

Scree

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?

**North East Boundary:** All DSH browsed back hard, and all accessible juniper browsed back into woody material – some j. bark-stripped and thrashed by red deer. Seedlings present though and high numbers of young trees illustrating good regen 20 – 40 years ago. All of this regen now heavily browsed and suppressed.

**South End:** Less browsing of established trees but also far fewer seedlings and young. Signs suggest that sheep are dominant grazer at this end of the site.

**Birch Woodland:** Healthy juniper with few signs of browsing or other damage.

**6. Other threats:** Some juniper have grown leggy in competition for light with taller birch. Little shading out as yet but with continued natural regen of birch, which is good at present, this will become a problem in the future. Presence of large sycamore seed trees could also create problems for juniper.

**7. Juniper age:**

Estimate Percentage					
seedling	young	mature	old	Ill	Dead
present	present	present	present	present	present
Comments: Many hundreds of young trees present and seedlings numerous at north end of site and around Silver Crag. Hundreds of diseased /dying trees in some locations. Reported to FERA May 2012.					

**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-NY3918-01A	n/a	n/a		Browsed and thrashed juniper showing substantial die back.
Jun-NY3918-01B	n/a	n/a		Photo taken from Silver Crag showing slopes of Birk Fell.
Jun-NY3918-01C	NY38746 18811	114 degrees		Taken from outlet of Glencoyne Beck looking across Ullswater. Overview of site.

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

Huge site with mostly healthy, dense juniper associated with a variety of habitats. To the north and west juniper provides an understorey to birch woodland, with few signs of shading out of juniper at present. The high altitude boundary to the east has juniper growing among dry heath with some areas of *Agrostis* / *Festuca* grassland and some lime rich flushes. To the south and west ground flora is predominantly acid grassland with some areas dominated by *Nardus stricta*. Impacts in this area are mostly from sheep but it appears that off-wintering is allowing natural regen in some areas such as Silver Crag. Impacts to the north and east are predominantly from red deer. Substantial regeneration here 20 – 40 years ago is now being heavily browsed and suppressed. Thousands of trees are affected, with some older trees bark-stripped and mature and young trees frayed / thrashed. Seedlings still present though and juniper seemingly targeted when it has grown above the surrounding vegetation. Juniper targeted before the winter period and seemingly in preference to Ericoids in some areas.

During the October visit, witnessed siskins and redpoll, tit flocks with long-tailed tit, blue tit, great tit and coal tit, and redwing and fieldfare overhead. Recorded 10 red deer during the October survey and 14 during the December survey. Associated trees – birch, rowan, ash, oak, holly, hawthorn, yew, willow, sycamore (large old tree at NY39879 18431) and aspen (clone of 40 stems at NY39625 18204).

**May 2012:** Areas of die off amongst trees showing *Phytophthora austrocedrae* symptoms – around NY39690 18280 and NY 39880 17650.

### **Bird survey - Spring 2012**

A complete point count survey was planned but then aborted this spring after 1 visit to each point, due to poor weather. During the three visits that were made the following list of breeding species (probable or possible) was made:

Wren	Robin
Chaffinch	Song thrush
Meadow pipit	Coal tit
Goldcrest	Blackbird
Ring ouzel	Willow warbler
Lesser redpoll	Siskin
Dunnock	Linnet

Birds that were present in the birch woodland at the bottom of the slope, but not necessarily associated with juniper, were spotted flycatcher, pied flycatcher and garden warbler.