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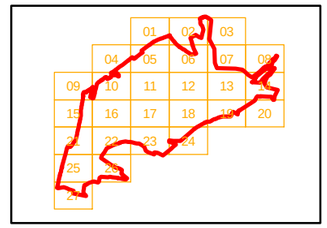
67500.000000 67000.000000 66500.000000 66000.000000

Dune Plain
Bosdet
High Dune
Frontal Dunes
Escarpment
Southern Area

Aerial photography: States of Jersey 2013



Legend

Dune areas

Habitats:

- Yellow dune communities 2014 (excluding grey dune)
- Yellow dune mosaic with other habitat eg bracken or gorse or scrub or sand etc (excluding grey dune)
- Yellow dune communities 2014 with a mosaic of Grey dune
- Yellow dune communities with a mosaic of Grey dune and another habitat eg bracken or gorse or scrub or sand etc

N

ISO A3

Metres

0 25 50 100 150

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Telephone 01298 27086

Project Name: Vegetation Condition Assessment - LBB 2014

Discipline: Ecology

Title:

Distribution of Yellow Dune Communities 2014

Scale	Drawing No.	
1:7,000	Figure 10	
Drawn By: JL	Originator: KL	Date: MAR 2015
PAA Ref: G:\JIDC30-31_Remapping_2014\Maps\Figures_ConditionAssessment_JIDC30		Revision: B

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Dune Plain

Bosdet

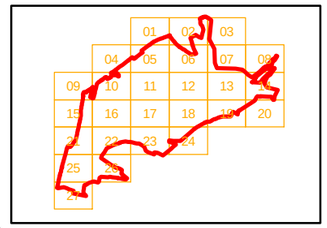
High Dune

Frontal Dunes

Escarpment

Southern Area

Aerial photography: States of Jersey 2013



Legend

Dune areas

Habitats:

- Grey dune communities 2014 (excluding yellow dune)
- Grey dune mosaic with other habitat eg bracken or gorse or heath (excluding yellow dune)
- Grey dune communities 2014 with a mosaic of Yellow dune
- Grey dune communities with a mosaic of Yellow dune and another habitat eg bracken or gorse or heath

N

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Project Name: Vegetation Condition Assessment - LBB 2014

Discipline: Ecology

Title:

Distribution of Grey Dune Communities 2014

Scale	1:6,500	Drawing No.	Figure 11
Drawn By	JL	Originator KL	Date MAR 2015
PAA Ref.	G:\JIDC30-31_Remapping_2014\Maps \Figures_ConditionAssessment_JIDC30	Revision	A

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Dune Plain

Bosdet

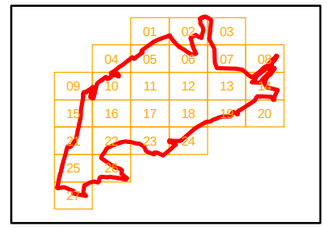
High Dune

Frontal Dunes

Escarpment

Southern Area

Aerial photography: States of Jersey 2013



Legend

Dune areas

Gorse habitats 2014:

- Gorse habitats
- Gorse and grey dune mosaic
- Gorse, grey dune and bracken mosaic
- Gorse and yellow dune mosaic
- Gorse and scrub mosaic
- Gorse, scrub and bracken mosaic
- Gorse and bracken mosaic
- Gorse and heath mosaic
- Gorse and other eg tall herb

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Project Name: Vegetation Condition Assessment - LBB 2014

Discipline: Ecology

Title:

Distribution of Gorse Communities 2014

Scale	Drawing No.		
1:7,000	Figure 12		
Drawn By: JL	Originator: KL	Date: MAR 2015	
PAA Ref: G:\JIDC30-31_Remapping_2014\Maps \Figures_Condition Assessment_JIDC30		Revision: B	

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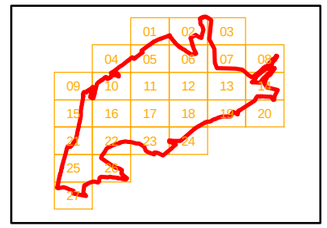

Legend

Dune areas

Scrub habitats 2014:

- Scrub habitats
- Scrub and grey dune mosaic
- Scrub, yellow dune and grey dune mosaic
- Scrub and yellow dune mosaic
- Scrub, grey dune and bracken mosaic
- Scrub and heath
- Scrub and gorse mosaic
- Scrub, gorse and bracken mosaic
- Scrub and bracken mosaic
- Scrub and woodland mosaic
- Scrub and sand mosaic
- Scrub and other mosaic eg Tall herb

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Project Name: Vegetation Condition Assessment - LBB 2014

Discipline: Ecology

Title:

Distribution of Scrub Communities 2014

Scale	Drawing No.
1:7,000	Figure 13

Drawn By	Originator	Date
JL	KL	MAR 2015

PAA Ref: G:\IIDC30-31_Remapping_2014\Maps \Figures_ConditionAssessment_IIDC30

Revision: B

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Dune Plain

Bosdet

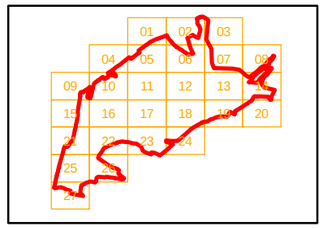
High Dune

Frontal Dunes

Escarpment

Southern Area

Aerial photography: States of Jersey 2013



Legend

Dune areas

Woodland Habitats 2014:

Woodland habitat

Woodland and scrub mosaic

NB: Individual trees Qi and Pi not shown as not classed as a woodland habitat in own right in this report

N

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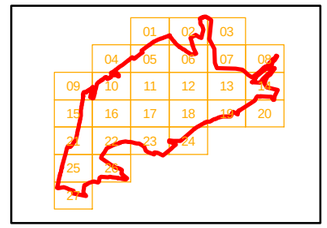
Project Name: Vegetation Condition Assessment - LBB 2014

Discipline: Ecology

Title:

Distribution of Woodland Communities 2014

Scale	Drawing No.	
1:7,000	Figure 14	
Drawn By: JL	Originator: KL	Date: MAR 2015
PAA Ref: G:\JIDC30-31_Remapping_2014\Maps\Figures_ConditionAssessment_JIDC30	Revision: B	



Legend

- Dune areas

Heathland Habitats 2014:

- Heath habitats
- Heath mosaic with grey dunes
- Heath mosaic with yellow dunes
- Heath mosaic with gorse
- Heath mosaic with scrub
- Heath mosaic with bracken

N

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Project Name: Vegetation Condition Assessment - LBB 2014

Discipline: Ecology

Title:

Distribution of Heathland Communities in 2014

Scale	Drawing No.
1:7,000	Figure 15

Drawn By	Originator	Date
JL	KL	MAR 2015

PAA Ref: G:\JIDC30-31_Remapping_2014\Maps \Figures_Condition Assessment_JIDC30

Revision: B

APPENDICES

APPENDIX 1

Monitoring Forms

01 - Yellow Dunes Habitat Condition Monitoring Objectives

Conservation objective for maintenance management		To maintain **yellow dune patches** on Les Blanches Banques with diverse range of native species:
Extent	**Lower limit**	The area of all the patches together is not reduced. See aerial photo and mapped patches 2005 for area covered. Their movement is acceptable
	Upper limit	No limit set, but note if displaces good quality dune vegetation and consider action if this is significant
Quality	**Lower limit**	90% of patches should meet criteria.

Site-specific habitat definitions	
Criteria for yellow dunes	**In any 1 patch:** Healthy marram and/or sand couch with abundant flowering heads should be present. Estimate % cover of these. 60% of the vegetation should be >30cms tall. Bare sand should be more than 30-40% of the patch (open marram) or patch is mixed with other vegetation types. State which and % of bare sand. There should be at least 2 of the following plants that are at least occasional in the patch: lesser hawkbit — hare's tail — sea holly sea bindweed — grey hair-grass — early sand-grass sand cat's-tail — lady's bedstraw
Presence of damaging features	**In any 1 patch:** There should be no scrub or trees except burnet rose. Estimate the % cover of any across the patch. Bracken cover should be no more than 15% and not dense thus shading out other species. There should be <5% of ragwort and/or nettle cover. There should be no damage to the ground from vehicles, excavation, dumping of materials, etc. Estimate the % cover of any of these and note their type. If stock grazing is present, estimate % flowering of main plants in patch and comment on degree of any trampling damage. These should not be significant (ie over 20% of plants affected).

01_Yellow Dunes Monitoring Assessment Form - Les Blanches Banques July 2014

Compartment:						
Patch/Assesor:						

Attribute	**Target (for the entire feature)**	**Monitoring Technique**					
Extent of Habitat							
Lower Limit	No loss of habitat from 2005, Movement of patches is acceptable	Aerial photography					
Upper Limit	None set but note if displaces good quality dune veg and consider action if sig.						
Quality lower limit	90% of patches should meet the following criteria;						
Vegetation Composition							
Healthy cover of marram and /or sand couch. Specify which	Healthy marram and/or sand couch with abundant flowering heads should be present.	Visual assessment across the patch. (% cover).					
Vegetation height	60% of vegetation should be >30cm tall						
Cover of bare sand	Bare sand should be > 30-40% of the patch (open marram) area (unless mixed with other veg.)						
What other veg types in patch and % bare sand							
List 1 (Dafor)							
Sea bindweed	*Calystegia soldanella*	Visual assessment across the patch. (Dafor). (2 or more should be more than occasional)					
Grey hair-grass	*Corynephorus canescens*						
Sea holly	*Eryngium maritimum*						
Lady's bedstraw	*Galium verum*						
Hare's tail	*Lagurus ovatus*						
Lesser hawkbit	*Leontodon saxatilis*						
Early sand-grass	*Mibora minima*						
Sand cat's tail	*Phleum arenarium*						
Estimate effect of rabbits	DAFOR based on droppings, flowering, digging	visual estimate across patch					
Damaging Features							
Cover of trees/scrub, specify species	*No scrub or trees (exclude burnet rose)*	Estimate % cover across the patch and list species					
Cover of brachen	*Bracken <15% when fully open, not dense or shading out other spp.*						
Cover of ragwort	*Ragwort, bramble or nettle< 5%*						
Cover of bramble							
Cover of nettle							
Damage from vehicles, excavation, dumping, etc	*No damage from vehicles, excavation, dumping, etc*	Estimate % cover across the patch and note type of damage					
Is stock present?	*If stock present estimate % flowering of main plants*						
Percentage flowering of main plants							
Effect of stock trampling	*Comment on degree of any stock trampling damage (<20% affected)*						

02 -Grey Dunes Habitat Condition Monitoring Objectives

<table>
<tr><td colspan="2">Conservation objective for maintenance management</td><td>To maintain grey dune patches on Les Blanches Banques with a high diversity of native species:</td></tr>
<tr><td rowspan="2">Extent</td><td>Lower limit</td><td>The area of all the patches together increases or is at least not reduced. See aerial photo and mapped patches 2005 for area covered. Their movement is acceptable</td></tr>
<tr><td>Upper limit</td><td>No limit set, but note if displaces good quality dune vegetation and consider action if this is significant</td></tr>
<tr><td>Quality</td><td>Lower limit</td><td>90% of patches should meet criteria.</td></tr>
<tr><td colspan="3">Patch-specific habitat definitions</td></tr>
<tr><td colspan="2">Criteria for grey dunes</td><td>In any 1 patch determine the type of community by:
1. Is burnet rose dominant or co-dominant with >40-50% cover?
2. Is there bare sand covering > 15% of ground?
3. Are there many mosses and lichens in the vegetation?
4. Is the vegetation dense or with many small gaps between plants with sand or litter visible?
5. Are there > or <20 species in the patch (omit burnet rose)?
6. Vegetation 5-30cms tall or mostly over 30-40cms tall?
Flowering and fruiting of species should be at least frequent
If yes to Q. 2, 3, 4, >20 species and vegetation 5-30cms tall, then:
- 30-70% of sward should be species-rich short turf
- at least 10 species should be more than occasional from list below
early hair-grass | silver hair-grass | thyme-leaved sandwort
wild onion | sand sedge | common centaury
common mouse-ear | smooth hawk’s-beard | common stork’s-bill
Portland spurge | eyebright | fescues
lady’s bedstraw | dove’s-foot crane’s bill | common cat’s-ear
bird’s-foot trefoil | common restharrow | ribwort plantain
self-heal | burnet rose | biting stonecrop
wild thyme | hare’s-foot clover | hairy tare
If no to Q2, 3, dense vegetation, <20 species and taller plants, then:
at least 6 species should be more than occasional from the list above.
All the species of local distinctiveness should be present on the dunes. Count flowering spikes and plants of lizard orchids for comparison future years.</td></tr>
<tr><td colspan="2">Presence of damaging features</td><td>In any 1 patch:
There should be no scrub or trees except burnet rose. Estimate the % cover of any across the patch and list the species.
Bracken cover should be no more than 15% when fronds fully opened and not dense thus shading out other species.
There should be <5% of ragwort, bramble or nettle cover.
There should be no damage to the ground from vehicles, excavation, dumping of materials, etc. Estimate the % cover of any of these and note their type.
If stock grazing is present, estimate % flowering of main plants in patch and comment on degree of any trampling damage. These should not be significant (i.e. over 20% of plants affected).</td></tr>
</table>

02_Grey Dunes Monitoring Assessment Form - Les Blanches Banques July 2014

Compartment:
Condition Assessment Patch
Habitat Code

Attribute	Target (for the entire feature)	Monitoring Technique					
Extent of Habitat	Lower limit - no loss of habitat from 2005, Movement of patches is acceptable	Aerial photography					
	Upper limit - none set but note if displaces good quality dune veg and consider action if sig.						
Quality Lower Limit	90% of patches should meet the following criteria						

Vegetation Composition							
Is burnet rose dominant or co-dominant with> 40-50% cover. Y/N and approx cover		Visual assessment across the patch. (% cover or Dafor).					
Is there bare sand covering >15% of ground, Y/N approx cover							
Frequency of mosses and lichens in the vegetation (DAFOR)							
Is the vegetation dense (D) **or** with many small gaps between plants with sand or litter visible. (G)							
Are there more or less than 20 species in the patch. Omit Burnet rose. Y/N		Assess by eye, only list those in table below					
Vegetation height 5-30cm or over 30-40cm tall		Measure to 5cm, exclude flowering grass stalks					
Flowering and fruiting of species to be at least frequent		Visual assessment across patch (Dafor)					
Is 30-70% of sward sp rich turf? Y/N comment if needed	If YES to Q2,3,4 and >20sp and vegetation 5-30 cm tall then: 30-70% of sward should be species rich short turf. And at least 10 species (in list 1) should be more than occasional.	Visual across patch					
Is it dense vegetation with taller plants. Y/N comment if needed	If NO to Q2 and 3, dense vegetation , <20 species and taller plants, then at least 6 species from List 1 should be occasional.	Visual across patch					

List 1 (Dafor)							
Silver hair-grass	*Aira caryophyllea*	Visual assessment across the patch. (Dafor). (10 or more should be more than occasional)					
Early hair-grass	*Aira praecox*						
Thyme-leaved sandwort	*Arenaria serpyllifolia*						
Wild onion	*Allium vineale*						
Sand sedge	*Carex arenaria*						
Common centaury	*Centaurium erythraea*						
Common mouse-ear	*Cerastium sp*						
Smooth hawk's-beard	*Crepis capillaris*						
Common stork's-bill	*Erodium cicutarium*						
Portland spurge	*Euphorbia portlandica*						
Eyebright	*Euphrasia officinalis*						
Fescues	*Festuca sp*						
Lady's bedstraw	*Galium verum*						
Dove's-foot crane's bill	*Geranium molle*						
Common cat's-ear	*Hypochaeris radicata*						
Bird's-foot trefoil	*Lotus corniculatus*						
Common restharrow	*Ononis repens*						
Ribwort plantain	*Plantago lanceolata*						
Self-heal	*Prunella vulgaris*						
Burnet rose	*Rosa pimpinellifolia*						
Biting stonecrop	*Sedum acre*						
Wild thyme	*Thymus polytrichus*						
Hare's-foot clover	*Trifolium arvense*						
Hairy tare	*Vicia hirsuta*						

Species of Local Distinctiveness							
Jersey thrift	*Armeria arenaria*	Visual assessment across the patch (spike or plant count of lizard orchid)					
Small hare's ear	*Bupleurum baldense*						
Rough star thistle	*Centaurea aspera*						
Grey hair grass	*Corynephorus canescens*						
Lizard orchid	*Himantoglossum hircinum*						
Smooth cat's ear	*Hypochaeris glabra*						
Sea stock	*Matthiola sinuata*						
Early sand grass	*Mibora minima*						
Childing pink	*Petrorhagia nanteuilii*						
Early meadow grass	*Poa infirma*						
Four-leaved all-seed	*Polycarpon tetraphyllum*						
Sand crocus	*Romulea columnae*						
Balm-leaved figwort	*Scrophularia scorodonia*						
Bastard toadflax	*Thesium humifusum*						
Heath speedwell	*Veronica officinalis*						
Dwarf pansy	*Viola kitaibeliana*						

Estimate Effect of Rabbits	DAFOR based on droppings, flowering, digging	Visual estimate across patch					

Damaging Features							
Cover of trees and scrub specify species	No scrub or trees (exclude burnet rose)	Estimate % cover across the patch and list species					
Cover of bracken	Bracken <15% when fully open, not shading other spp						
Cover of ragwort	Ragwort, bramble or nettle< 5%						
Cover of bramble							
Cover of nettle							
	No damage from vehicles, excavation, dumping, trampling, etc	Estimate % cover across the patch and note type of damage					
Is stock present	If stock present estimate % flowering of main plants						
Percentage flowering of main plants							
Effect of stock trampling	Comment on degree of any stock trampling damage <20%						

03 - Conservation objective for Mature Gorse

Conservation objective for maintenance management		To maintain the **Mature Gorse** habitat at Les Blanches Banques SSI in favourable condition where;
Extent	***Lower limit***	Extent recorded in 2005 aerial photograph
	Upper limit	No greater than 15% increase on lower limit
Quality	***Lower limit***	> 85% of the area meets the following criteria;
	Upper limit	No limit set
Site specific habitat definitions		
	Within the defined area; > 20% and < 40% of vegetation cover is below 30cm in height and between 25 % and 35 % of gorse is > 40cm and < 100cm in height and Between 25 % and 35 % of gorse is > 100cm and < 200cm in height And *Ulex* spp. cover > 60% and < 80% of the area And no vegetation is over 3 metres in height And Bracken and Bramble comprise < 10% of the area And > 15% of the area must comprise coastal grassland (see definition in objective) And < 5% other tree and shrub species	

03_Mature gorse monitoring assessment form - Les Blanches Banques July 2014

Compartment					
Assessor/Patch					

Attribute	Target (for the entire feature)	Monitoring Technique					
Extent of Habitat							
	No greater than 15% decrease below the 2005 aerial photo	Base line map showing distribution of mature gorse					
	No greater than 15% increase on the 2005 aerial photo						
Quality	> 85% of the total site area meets the following criteria;						
Vegetation Structure							
Vegetation Height	20% and <40% of vegetation cover < 30cm tall	Visual assessment of % cover of as much of the patch that is visible from the sampling point.					
	25% to 35% of vegetation cover 40cm to 100cm tall						
	25% to 35% of vegetation cover 100cm to 200cm tall						
	Vegetation cover over 200cm in height						
	Vegetation cover over 300cm in height						
Vegetation Composition							
Gorse Cover	% gorse cover <30cm tall	Visual assessment of as much of the patch that is visible from the sampling point. Record % cover					
	% gorse cover 40-100cm tall						
	% gorse cover 100-200cm tall						
	% cover of gorse 60-80% of the area						
Underlying Vegetation							
~ % cover of dune (yellow or grey) vegetation. Specify which	(good condition >15% area)	Visual assessment of as much of the patch that is visible from the sampling point. Record % cover					
~ % cover of bracken/bramble. List species and cover	(good condition <10% area)						
~ % cover scrub/trees cover. List species & cover	(good condition <5%)						
Rabbit Presence	The number of visible rabbit warrens within the patch to be recorded	Visual assessment of as much of the patch that is visible from the sampling point.					

04 - Conservation Objective for Scrub Habitats

Conservation objective for maintenance management		To maintain **scrub** habitat in favourable condition where;
Extent	**Lower limit**	No limit set
	Upper limit	Extent recorded in 2005 aerial photograph
Quality	**Lower limit**	> 60% of the area meets the following criteria;
	Upper limit	No limit set
Site specific habitat definitions		
Scrub	Within the defined area; The scrub patch should have a canopy cover of 60% - 90%. Scrub species should be native shrubs not trees and consist of at least 2 of ; Hawthorn *Crataegus monogyna* Blackthorn *Prunus spinosa* Willow *Salix spp.*(excluding Crack willow) Elder *Sambucus nigra* Wild privet *Ligustrum vulgare* Dog rose *Rosa canina* Broom *Cytisus scoparia* Holly *Ilex aquifolium* Open ground should support species typical of adjacent valuable habitat i.e. grassland or heathland If sufficient light beneath the scrub are woodland ground flora species present? No trees - but note species and cover if present. No none native shrubs - but note species and cover if present Bracken and/or Bramble < 20% of the area Note any disturbance - Rubbish, burning, damage to scrub, vehicle movements etc	

04_Scrub Habitats Monitoring Assessment Form - Les Blanches Banques July 2014

Compartment:							
Assesor/Patch:							

Attribute	**Target (for the entire feature)**	**Monitoring Technique**					
Extent of Habitat							
Lower Limit	No Limit Set	Base line map showing distribution of scrub vegetation					
Upper Limit	Extent recorded in 2005 aerial photograph						
Quality of Habitat							
Lower Limit	>60% of the area meets the following criteria	**Frequency** - 'W' transect. Visual assessment of as much of the feature that is visible from the sampling point.					
Upper Limit	No Limit Set						
Vegetation Structure							
Within the defined area of the patch:	The scrub patch should have a 60 - 90% canopy cover of the patch (record % cover)	Visual assessment of as much of the feature that is visible from the sampling point.					
Vegetation composition							
Hawthorn	*Crataegus monogyna*	The species should be native and consist of trees and shrubs of at least two from the list (list all that apply including addit. spp).					
Broom	*Cytisus scoparius*						
Holly	*Ilex aquifolium*						
Wild privet	*Ligustrum vulgare*						
Blackthorn	*Prunus spinosa*						
Holm oak	*Quercus ilex*						
Dog Rose	*Rosa canina*						
Willows	*Salix* spp						
Elder	*Sambucus nigra*						
Flora beneath canopy	Any typical shade-tolerant spp	% cover of total shade-tolerant spp					
Negative Indicators							
	There should be no trees (including Holm oak, oak, ash, sycamore, elm, cherry pine etc). Note the cover of each species.	Visual assessment of as much of the feature that is visible from the sampling point					
	There should be no non-native shrubs (including tamarisk, apple, conifer, Japanese privet, cotoneaster, buddleia etc). Note % cover by spp.						
% cover of bracken and bramble	Bracken and/or Bramble < 20% of the area						
Disturbance	Rubbish, burning, damage to scrub, vehicle movements etc	Visual assessment					

05 -Conservation Objective for Mixed Woodland

Conservation objective for maintenance management		To maintain the woodland habitats in favourable condition where;
Extent	***Lower limit***	Extent recorded in 2005 aerial photograph
	Upper limit	No limit set - but not spreading into habitats of greater value
Quality	***Lower limit***	> 80% of the compartment meets the following criteria;
	Upper limit	No limit set
Site specific habitat definitions		
Structure		Within the defined area; Ground storey – seedlings and saplings of native canopy species at least rare. Sub storey – >20% of the subcanopy is to be made up of sub mature trees (2-5m tall layer) Dead wood – At least one dead tree >20cm DBH present or plenty of small standing dead wood must occur where considered safe
Composition		No more than 10% Conifer canopy present Trees with (DBH >20 cms) to be dominant: list Ancient and veteran trees present? >90% to of the species in the canopy and sub canopy to be native species
Quality		The ground storey must comprise of >3 desirable species of woodland plants:- Lady fern, male fern, broad buckler fern, harts tongue, shield ferns, polypody, Lords and Ladies – all spp, pendulous sedge, remote sedge, wood sedge, opposite-leaved golden saxifrage, enchanter's nightshade, pignut, foxglove, wood spurge, herb Robert, wood avens, bluebell, stinking iris, yellow archangel, honeysuckle, dog's mercury, wood sorrel, primrose, butcher's broom, red campion, greater stitchwort and common dog violet Epiphitic mosses/ lichens/ ferns must be at least occasional Note invasive species:- Periwinkle, winter heliotrope, Spanish bluebell and Rhododendron Erosion Other damage

05_Mixed Woodland Monitoring Assessment Form - Les Blanches Banques July 2014

Compartment:							
Assessor/Patch :							

Attribute	Target (for the entire feature)	Monitoring Technique					
Extent of habitat	No loss of habitat from 2005 aerial	Aerial photography					
	Upper limit - should not be spreading onto habitats of greater value						
Quality lower limit	> 80% of the area meets the following criteria;						
Vegetation Structure							
Ground story	Seedlings and saplings of native species should be at least rare. Specify species	Visual assessement inside patch					
Sub story	(Sub story = the layer 2-5m high). To have at least 20% cover. Specify species.	Assessment within patch. State % cover					
Dead Wood	At least one dead tree >20cm DBH should be present in the patch/ or plenty of small scattered pieces.	Assessment abundance within patch					
	Dead wood safe?						
Vegetation Composition							
No more than 10% conifer canopy present		Visual assessment of as much of the feature that is visible in patch					
State % BL trees with DBH >20cm							
Ancient & veteran trees present? (% cover)							
Native species Not located previously on the dunes (alder, ash, aspen, elm, hazel, holly, sweet chestnut) . **List if seen**	The woodland composition should be dominated by native species. 90% of wood native por tolerated spp	Assessment within patch. List tree species/ note DAFOR abundance					
Hawthorn	*Crataegus monogyna*	Assessment of whole patch. Note abundance (DAFOR)					
Broom	*Cytisus scoparius*						
Wild privet	*Ligustrum vulgare*						
Blackthorn	*Prunus spinosa*						
Holme/ Evergreen oak	*Quercus ilex*						
Pedunculate oak	*Quercus robur*						
Field rose,	*Rosa arvensis*						
Dog rose,	*Rosa canina*						
Sallow/ grey willow	*Salix cinerea*						
Crack willow,	*Salix fragilis*						
Elder	*Sambucus nigra*						
European gorse	*Ulex europaeus*						
Tolerated - But not previously located on the dunes) silver birch, beech, downy birch, hornbeam, field maple, yew, dogwood, medlar, rowan, cherry) **List if seen**	The woodland composition can include tolerated species at a level of > frequent	Assessment of whole patch. List tree species/ note abundance (DAFOR)					
Sycamore	*Acer pseudoplatanus*						
Pine species	*Pinus* sp.						
Undesirable - But not previously located on the dunes (horse chestnut, Norway spruce, Monterey cypress, poplars, Turkey oak, western red cedar, snowberry) **List if seen.**	The woodland composition should include undesirable species at a level of occasional or less	Assessment of whole patch. List tree species/ note abundance (DAFOR)					
Butterfly-bush	*Buddleja davidii*						
Apple species	*Malus* sp.						
Italian poplar	*Populus x canadensis*						
Rose species (garden)	*Rosa* sp.						
Ground Flora							
		List ground flora + DAFOR					
Polypody, mosses and lichens	Presence should be at least occasional and general abundance noted.	Visual assessment within patch					
Negative Indicators							
Invasive Species		These species should be absent - record presence using DAFOR. Any other potential invasive species should be noted.					
Periwinkle	*Vinca* spp						
Winter heliotrope	*Petasites hybridus*						
Spanish bluebell	*Hyacinthoides hispanica*						
Rhododendron	*Rhododendron ponticum*						
Erosion	Less than 1% of feature to show signs of 'hard' erosion or damage	Visual assessment					
Introduced material	There must be no evidence of fly tipping or other damage						

06 - Dune Heathland Habitat Condition Monitoring Objectives

Conservation objective for maintenance management		To maintain **dune heath patches** on Les Blanches Banques with a high diversity of native species:
Extent	**Lower limit**	The area of all the patches together increases or remains stable. See aerial photo and mapped patches 2005 for area covered. Their movement is acceptable
	Upper limit	No limit set, but note if displaces good quality dune vegetation and consider action if this is significant
Quality	**Lower limit**	95% of patches should meet criteria.

Patch-specific habitat definitions

Criteria for dune heath

In any 1 patch of dune heath:

- At least one dwarf-shrub species (note if it is bell heather or heather) more than occasional (about 20% cover) in sward
- Flowering and fruiting of all species should be at least frequent
- Remainder of vegetation composed of fixed grey dune grassland
- At least 8 species should be more than occasional from list below

sand sedge	common centaury	common mouse-ear
smooth hawk's-beard	common stork's-bill	Portland spurge
eyebright	fescues	other grasses
lady's bedstraw	dove's-foot crane's bill	common cat's-ear
bird's-foot trefoil	common restharrow	ribwort plantain
self-heal	burnet rose	wild thyme
hare's-foot clover	hairy tare	

Presence of damaging features

In any 1 patch:

There should be no scrub or trees except burnet rose, heather and bell heather. Estimate the % cover of any across the patch and list species.

Bracken cover should be no more than 15% when fronds are fully open and not dense thus shading out other species.

There should be <5% of ragwort, bramble or nettle cover.

There should be no damage to the ground from vehicles, excavation, dumping of materials, etc. Estimate the % cover of any of these and note their type.

If stock grazing is present, estimate % flowering of main plants in patch and comment on degree of any trampling damage. These should not be significant (ie over 20% of plants affected).

06_Dune Heathland Monitoring Assessment Form - Les Blanches Banques July 2014

Compartment:							
Assessor/Patch :							

Attribute	**Target (for entire feature)**	**Monitoring technique**					
Extent of Habitat							
Lower Limit	No loss of habitat from 2005, Movement of patches is acceptable	Aerial photography					
Upper Limit	None set but note if displaces good quality dune veg and consider action if sig.						
Quality lower limit	95% of patches should meet the following criteria;						
Vegetation Composition in Patch							
At least one dwarf shrub species more than occasional		Note species and % cover					
Flowering & fruiting of all species should be at least frequent							
Remainder of vegetation composed of fixed grey dune grassland		Visual assessment across the patch. (% cover or Dafor).					
At least 8 species more than occasional from list 1							
List 1 (Dafor)							
Sand sedge	*Carex arenaria*	Visual assessment across the patch. (Dafor). (8 or more should be more than occasional)					
Common centaury	*Centaurium erythraea*						
Common mouse-ear	*Cerastium fontanum*						
Smooth hawk's-beard	*Crepis capillaris*						
Common stork's-bill	*Erodium cicutarium*						
Portland spurge	*Euphorbia portlandica*						
Eyebright	*Euphrasia officinalis*						
Fescues	*Festuca sp*						
Lady's bedstraw	*Galium verum*						
Dove's-foot crane's bill	*Geranium molle*						
Common cat's-ear	*Hypochaeris radicata*						
Bird's-foot trefoil	*Lotus corniculatus*						
Common restharrow	*Ononis repens*						
Ribwort plantain	*Plantago lanceolata*						
Self-heal	*Prunella vulgaris*						
Burnet rose	*Rosa pimpinellifolia*						
Wild thyme	*Thymus polytrichus*						
Hare's-foot clover	*Trifolium arvense*						
Hairy tare	*Vicia hirsuta*						
Damaging Features							
No scrub or trees (except burnet rose, heather or bell heather)		Estimate % cover across the patch and list species					
Bracken <15% when fully open, no shading or other spp							
Ragwort, bramble or nettle< 5% cover							
No damage from vehicles, excavation, dumping, etc		Estimate % cover across the patch and note type of damage					
Is stock present? Y/N							
If stock present estimate % flowering of main plants							
Comment on degree of any stock trampling damage (<20% affected)							
Estimate effect of rabbits (DAFOR)	Use abundance of droppings/diggings flowering	Across whole patch					

APPENDIX 2

The Plant Communities

APPENDIX 2: THE PLANT COMMUNITIES

A - The Disturbed, Tall Herb Community

T - Tall Ruderal

B - Short Species-rich Vegetation with Moss and Lichens

Bi - A Variable, Short Turf Species-rich Community

Bii - Trampled, Species-rich Community

C - Open Tussocky Marram Grass

D - Closed Marram

E - Rank Grassland

F - Gorse Scrub

G - Mixed Shrubs

H - Wet Rush-grass/Wetland Vegetation

I - Bracken Dominant or Co-dominant

J - Burnet Rose Dominant

K - Woodland

L - Heathland

A - The Disturbed, Tall Herb Community

This community mostly occurs along the road-side banks and areas near the car parks. It was established when the car parks were developed and was colonised by a range of easily dispersed species, including many indicative of an enriched soil. The main species were marram (*Ammophila arenaria*), cock's-foot (*Dactylis glomerata*), and ribwort plantain (*Plantago lanceolata*). The conspicuous plants of hogweed (*Heracleum sphondylium*) and fennel (*Foeniculum vulgare*) stood out amongst the tall herbage, whilst smaller species compete for space nearer the ground.

The species in 2014 were similar to those above but with additional quantities of some of the ruderal annual grasses such as large quaking grass (*Briza maxima*), barren brome (*Anisantha sterilis*) and great brome (*Anisantha diandra*) and thistles (*Cirsium* species).

T – Tall Ruderal

A new type of ruderal community was found within La Moye Golf Course, with fewer annual species but a number of common 'weedy' types of species. The core of the vegetation is

common nettle (*Urtica dioica*), but with frequent Yorkshire fog (*Holcus lanatus*) and ruderal species like hemlock (*Conium maculatum*), smooth sow thistle (*Sonchus oleraceus*), hogweed, cleavers (*Galium aparine*) and cock's-foot.

B - Short Species-rich Vegetation with Moss and Lichens

B is open, with some bare ground on a small intimate scale, species-rich, short, mostly rabbit dug and grazed, with less than 50% cover of burnet rose. Sometimes bracken (*Pteridium aquilinum*) can invade in the B community, both the diverse one and the more robust fescue sward (Bi).

The community is relatively rich in broadleaved species but also has an abundant cover of lichens and moss. It is extensive lichens like *Cladonia* and *Peltigera* that characterise B, plus mosses of open ground such as *Tortula* species. *Scleropodium purum* is also an abundant moss in this community. In some areas, however, burnet rose can attain local prominence. Due to a high level of rabbit activity in these areas there are often several patches of sand within them, which can be identified on the aerial photographs.

There are a wide variety of accompanying species in this species-rich community including common bird's-foot trefoil (*Lotus corniculatus*), common restharrow (*Ononis repens*), field wood-rush (*Luzula campestris*), wild thyme, (*Thymus polytrichus*), fragrant evening-primrose (*Oenothera stricta*) and the two plantains, ribwort and buck's-horn (*Plantago lanceolata* and *P. coronopus*). Annuals are also conspicuous, such as early sand-grass (*Mibora minima*) one of the rarer species, sand cat's-tail (*Phleum arenaria*), early and silver hair-grasses, (*Aira praecox* and *A. caryophyllea*), hare's-tail (*Lagurus ovatus*) and dune fescue (*Vulpia fasciculata*). The grey hair-grass (*Corynephorus*

Bi - A Variable, Short Turf Species-rich Community

This community is characterised by a more dense cover of vegetation with less burnet rose and rabbit activity, and less moss and lichen cover. Areas of this community comprise a complete plant cover with abundant red fescue and sometimes burnet rose. A variety of perennials provide the community matrix – especially biting stonecrop (*Sedum acre*), common restharrow, smooth hawk's-beard (*Crepis capillaris*), lady's bedstraw (*Galium verum*), common bird's-foot trefoil, ribwort plantain, sand sedge (*Carex arenaria*), wild thyme and bulbous buttercup (*Ranunculus bulbosus*). Other species include the Jersey thrift (*Armeria arenaria*) and rough star-thistle (*Centaurea aspera*). In addition, there are often good numbers of annuals, especially winter annuals, in this sward.

The annuals include several pretty little grasses like early and silver hair-grass although these seemed to be abundant in particular areas and scarce in others) and dune fescue. The range of other annuals is equally wide. There are several small crucifers and chickweeds, thyme-leaved sandwort (*Arenaria serpyllifolia*), red bartsia (*Odontites verna*) and early sand-grass representing the annual interest. The very rare childing pink (*Petrorhagia nanteuilii*) is found occasionally also with and the nationally rare small hare's-ear (*Bupleurum baldense*).

One group of plants which is particularly well represented in this community type is the clovers and in addition medick species too.

Bii - Trampled, Species-rich Community

On the vegetated paths trampling reduces the height and vigour of many species and can eliminate those which are more sensitive from the plant community. On the other hand, there are plants which are more tolerant of being trampled and which will spread into the vacated niches in a community. Thus, different trampling intensities produce different communities and there is often a gradation of use across a path, producing a lightly trampled fringe and more heavily used central section. More than one path community, therefore, can be present on each path section.