

# **Crowborough Ghyll LNR**

## **Five-year Management Plan**

### **2021 to 2025**

Prepared by Dolphin Ecological Surveys  
for Crowborough Town Council



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# 1.0 Background

## 1.1 Context

This management plan for the site known as Crowborough Ghyll (“the Ghyll”) that lies in the northeast of the town of Crowborough in East Sussex. It has been prepared by Kate Ryland BSc, CEnv, MCIEEM of Dolphin Ecological Surveys at the request of Crowborough Town Council (CTC).

The plan covers the whole of Crowborough Ghyll Local Nature Reserve (LNR) plus two areas of grassland that fall outside the LNR boundary but which are managed as part of the nature reserve (see Figure 2 Management Compartments). It sets out a programme of management actions for the five-year period 2021 to 2025 (which includes work to be done in the late winter of 2020). Recommendations are summarised in the Five-year Action Plan.

This five-year plan is primarily informed by a habitat and management assessment that took place during site visits in June and August 2020 and on discussions with the CTC Ranger. Supporting documents that contributed to the content of this new plan are listed in the Reference section. These include two previous five-year management plans for the Ghyll.

The format of this five-year management plan broadly follows the previous plans and incorporates new biological information that has become available since 2015.

The results of the 2020 habitat and management assessment survey are presented in an appendix to the management plan.

## 1.2 Site Details

### 1.2.1 Location & Ownership

Site Name:	Crowborough Ghyll Local Nature Reserve & Palesgate Meadows
National Grid Reference:	TQ533305
Area:	Approximately 25ha (61.8acres)
Ownership:	Crowborough Town Council

### 1.2.2 Site Status

The Ghyll has statutory designation as a Local Nature Reserve (LNR) and is recognised as a non-statutory Local Wildlife Site (LWS). Local Wildlife Sites were formerly known as Sites of Nature Conservation Importance (SNCIs). The Ghyll LNR falls almost entirely with CW72 Crowborough Ghyll LWS, which extends beyond the land owned by CTC.

### 1.2.3 Key Habitats

Crowborough Ghyll supports a range of important semi-natural habitats, including Priority Habitats under Section 41 of the 2006 Natural Environment and Rural Communities Act (NERC Act). The most notable and fragile of these habitats are ancient gill woodland and species-rich grassland.

Other valuable habitat components of the site are the areas of scrub, tussocky grassland, diverse hedgerows, bracken stands and mixed secondary woodland.

## 1.3 Supporting Information

### 1.3.1 Previous Management Plans

The original 2010 management plan for the Ghyll (Dolphin Ecological Surveys 2010a) contains descriptions of the vegetation of The Ghyll and sets out the ecological importance of its diverse habitats based on survey work carried out in that year.

In 2012 CTC acquired the adjoining area of grassland, known as “Palesgate Lane Meadows”. A preliminary ecological assessment and an interim winter work plan for 2012/13 was prepared for that site (Dolphin Ecological Surveys 2012a).

In 2015 the impact of management carried out by CTC on habitats within the Ghyll was reviewed and a new five-year plan written (Dolphin Ecological Surveys 2015).

### 1.3.2 Data Search

A data search was supplied by the Sussex Biodiversity Record Centre (SxBRC) in July 2020. Many of the biological records contained in the SxBRC report derive from the work done on behalf of CTC to support the previous management plans.

The boundaries of the LNR and the LWS can be found within the SxBRC Ecological Data Search supplied by Sussex Biodiversity Records Centre in July 2020.

No particularly significant post-2015 records of protected and designated species that are specifically from the Ghyll were contained in the data search. However the record of Cinnabar moth *Tyria jacobaeae* (2018) is of some interest because its larvae feed on Common Ragwort *Jacobaea vulgaris*, which occurs in abundance in parts of the Palesgate Lane meadows. Large populations of this moth larva can help to reduce the vigour of Ragwort plants and may gradually reduce the population size of this species over time if seed production is affected.

### 1.3.3 Faunal Surveys

In 2012 reptile and amphibian surveys were carried out at the Ghyll (Barry Kemp Conservation Ltd. 2013).

The eastern slopes of the Ghyll (compartments 11 and 13) were found to support all four of the relatively widespread British reptile species (grass snake, slow worm, adder and common lizard). The presence of adders is particularly important because populations of this native reptile are believed to be in serious decline at a national level.

In 2010 a nest tube survey revealed the presence of dormice (a European Protected Species) in the Ghyll. Subsequently 50 dormouse nest boxes were installed in 2011 so that the site could be entered into the National Dormouse Monitoring Programme (NDMP) (Dolphin Ecological Surveys 2012b).

The dormouse monitoring carried out for CTC in 2011 and 2012 found dormice in nest boxes on both sides of the gill stream (in compartments 3 and 6). They are also highly likely to be present in a range of woodland, scrub and hedgerow habitats in other parts of the site.



Unfortunately the dormouse nest boxes in the Ghyll were subject to increasingly high levels of disturbance and at the end of 2012 it was decided to suspend the NDMP surveys due to the risk of adverse impacts on individual animals and on the population as a whole. To date (2020) the NDMP surveys have not been resumed but it remains an aspiration to do so in future.

## **1.4 Management Rationale**

The 2010 Ghyll Management Plan was written at a time when management resources were limited and there was very little baseline biological data about the site. A gradual approach to management activity was adopted based on the precautionary principle due to the sensitive nature of the habitats present, particularly gill woodland, which is a habitat that is very vulnerable to damage through sudden change.

During the first period of management of the site by CTC, from 2010 to 2014, the prescribed management focus was on gathering information about the wildlife present, managing the valuable grassland areas and getting to grips with potentially problematic invasive species.

Wildlife rich grassland habitats are much more likely than woodland to deteriorate in the short term without appropriate management. Equally, spending time and money on controlling invasive species at an early stage of infestation is by far the best and most cost-effective management option.

The management rationale and prescriptions for the Ghyll remained largely unchanged for the second five-year management plan cycle (2015 to 2019). Section 2 of this plan includes a review of the outcomes of site management activities that were carried out at The Ghyll from 2015 to 2019.

In Section 3 the management recommendations for the next five-year period are set out. Actions are scheduled to begin from November 2020 and continue until the end of 2025. The plan should be reviewed in autumn 2025 and a new five-year plan drawn up.

## **1.5 Recent Changes Affecting Management**

### **1.5.1 Land Acquisition**

Since 2015 a small area of woodland on the west of the Ghyll, adjoining compartments 6 and 7 was transferred to CTC as part of a Section 106 agreement associated with the housing development of Nassau Drive. This area has been allocated compartment number 6b.

A larger parcel of woodland on the western side of the Ghyll, adjoining compartments 4b and 5 was acquired by CTC to consolidate and enhance the LNR in line with the recommendation made in the 2015 management plan. This area has been allocated compartment number 14.

### **1.5.2 Site Ranger**

A new CTC Ranger was appointed in 2015 and now works 4 days per week. The new Ranger has been able to implement many of the management recommendations from the 2015 management plan and has also been extremely proactive in improving community engagement at the Ghyll.

## **1.6 Resources Available**

Inevitably the resources that are available for site management remain a limiting factor for what can be achieved at the Ghyll.

The skills and experience of the new Ranger have been crucial to successfully progressing many of the site objectives since 2015. These achievements form a robust basis for management work over the next five-year management cycle.

There have been successful applications for grants to support site management at the Ghyll over the last five years. All suitable external sources of funding should continue to be explored over the life of this management plan.

## **2.0 Review of Site Management from 2015 to 2019**

### **2.1 Management Objectives 2015 to 2019**

In 2015 the management objectives for Crowborough Ghyll were:

- To conserve and enhance the biodiversity of the site
- To undertake appropriate, beneficial management of the semi-natural habitats present
- To control invasive plant species
- To maintain the cherished “unspoilt” feeling of the site for visitors whilst maintaining safe, open access
- To increase community engagement with the site and reduce damaging abuses of The Ghyll LNR

### **2.2 Management Achievements 2015 to 2019**

This section contains a summary review of progress that has been made on the management tasks that were recommended in previous management plan for the Ghyll.

## Figure 1. Summary of Progress 2015 to 2019

### Key:

Red = Task not carried out or no significant progress made

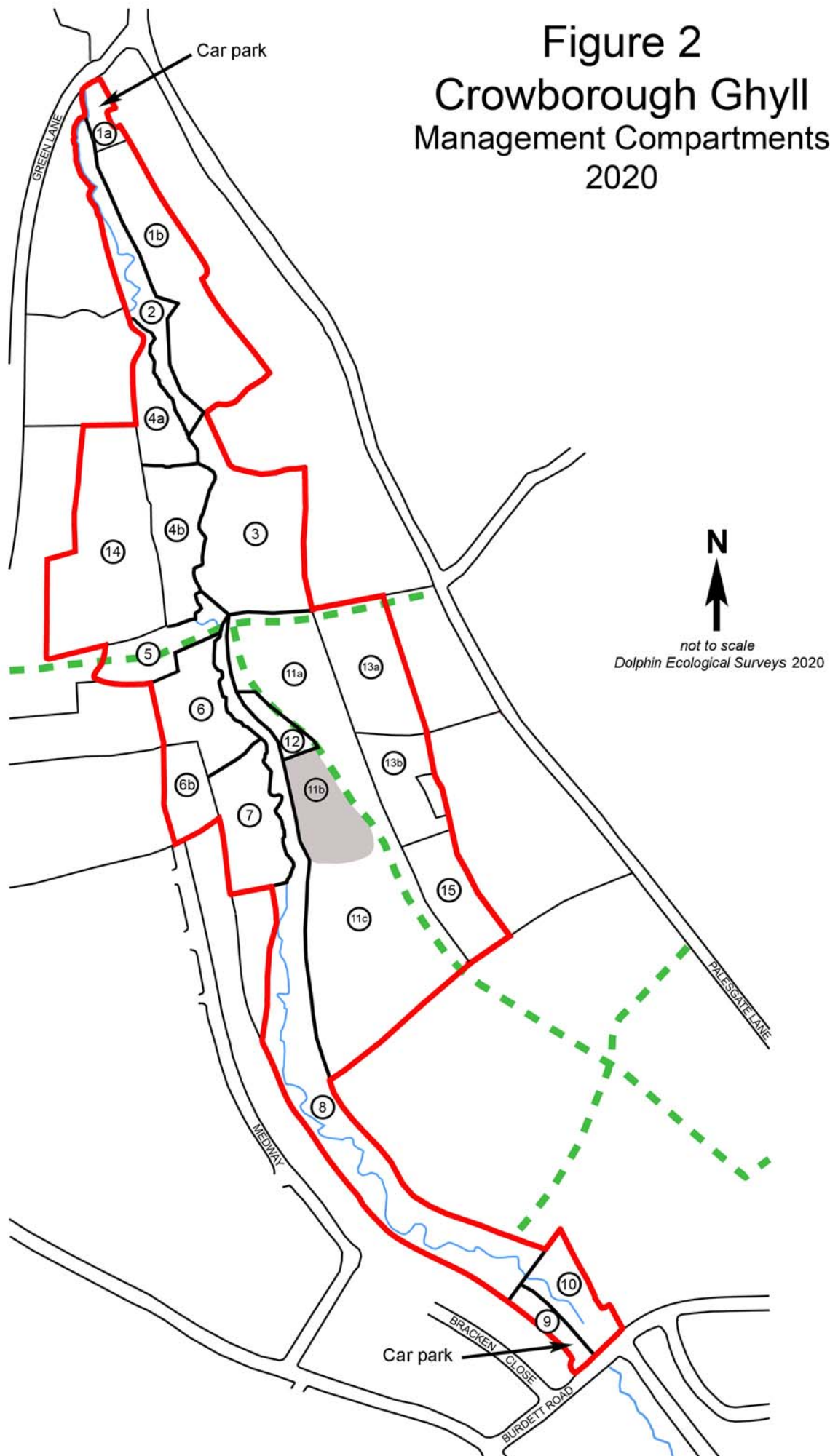
Orange = Task has commenced but incomplete and/or to be carried over to the next plan

Green = Task successfully completed/near completion or with positive outcomes to be continued in future

MANAGEMENT TYPE	RECOMMENDED ACTIONS	PROGRESS/OUTCOME
Grassland management	Grazing	Seasonal (autumn) pony grazing in Palesgate Meadows since 2014 has been ecologically successful and popular with visitors. A local grazier now supplies ponies
	Mowing	Jubilee Meadow has been mown and cuttings collected very successfully using new in-house equipment. This has given much better control for optimum timing of management. Cut material is piled on the site edges within areas of scrub. Some recent experiments with rotational cutting
	Grassland edge management	Not yet carried out and some signs of Blackthorn encroachment from edge habitats
	Tree removal in compartment 11a	Carried out very successfully but will need ongoing control
Invasive species control	Update INNS map	Not yet completed
	INNS control	Carried out successfully on key species, particularly Rhododendron, Cherry Laurel, Japanese Knotweed and Indian Balsam but these will always be ongoing. Task days to control Ragwort, Bracken and Bramble in the grassland of compartment 13b have been successful and are ongoing
Woodland & scrub management	Selective tree removal on the west-facing slope (compartment 11b) and along the footpath	Not yet carried out
	Glade creation in Gorse	Not yet carried out but an accidental fire in early 2020 has created a de facto glade
	Experimental Bracken raking	Carried out and the results are under review
	Selective coppicing along the main path in the gill	Carried out successfully and ongoing

MANAGEMENT TYPE	RECOMMENDED ACTIONS	PROGRESS/OUTCOME
	Targeted path improvement between Jubilee Meadow and the woodland	Carried out very successfully using locally sourced crushed sandstone
	Routine path edge maintenance	Low-key path edge management carried out successfully and ongoing
	Hedgerow management	Reduced trimming of the hedgerow in Jubilee Meadow (2-year rotation) and minimal management of hedges around Palesgate Lane meadows has been very successful and increased the quality and connectivity of valuable habitats
Survey & monitoring of flagship and protected species	Fixed-point photographic monitoring	Carried out annually by the Ranger, ongoing
	INNS mapping and monitoring	Not yet completed
	Extended dormouse survey and monitoring	Currently suspended but could resume if boxes can be installed in safe locations
	Survey and mapping of Hay-scented Buckler-fern	Not carried out as this species may no longer be present on the site
	Surveys of newly acquired woodland and grassland	Not yet carried out
	Early spring adder survey to find hibernacula	Some adder surveys have been carried out but more monitoring is needed
	Surveys of fungi, butterflies, birds and bats as resources or expertise allow	A regular butterfly transect is now recorded and moth trapping has been carried out
Completion of LNR designations for the Ghyll	Adjoining land acquisition policy	Successful LNR designation. Two new woodland parcels acquired. An ongoing policy
Management to improve safe access	Enhancement to the Burdett Road car park	Successfully completed
Enhancing interpretation & community engagement	Self-guided nature trail leaflet	Not yet completed
	Removal of old fences	Carried out successfully. More to do especially in the newly acquired area
Reducing site abuses	Increased Ranger presence and visitor interaction	Very successful
	Tackling garden waste dumping	Waste dumping has been considerably reduced in some areas but an ongoing task
	Regular litter removal	Ongoing litter control is successful but never-ending

Figure 2  
Crowborough Ghyll  
Management Compartments  
2020





## **3.0 The Ghyll Management Plan for 2021 to 2025**

### **3.1 Area Covered by the 2021 to 2025 Plan**

The area covered by this plan is shown on the site maps and is expanded from the previous plan to include two newly acquired areas of woodland on the west of the site. One area of grassland in the east that was included in the 2015 plan (compartment 13c) has been removed for the duration of this management plan.

Some slight alterations have been made to the compartment numbers (see Figure 2) to encompass the newly acquired land, which are designated compartments 6b and 14. An area of Holly woodland that was formerly included within compartment 13b has been separated into a new compartment 15.

### **3.2 Management Objectives 2021 to 2025**

The basic management objectives for Crowborough Ghyll LNR remain the same as they were in 2015 but there needs to be a change of emphasis in the management priorities. This will ensure that the LNR can continue to fulfil its dual purposes of being an important site for wildlife conservation and as a place for informal recreation.

- To conserve and enhance the biodiversity of the site
- To sustain and improve community engagement as the best way to reduce damaging behaviour that has an adverse impact on the Ghyll
- To undertake appropriate, beneficial management of the semi-natural habitats present
- To control invasive native and non-native plant species (INNS)
- To maintain the cherished “unspoilt” feeling of the site for visitors whilst maintaining safe, open access

### **3.3 Management Recommendations 2021 to 2025**

Management decisions made over the next five-year period must recognise and address the changes brought about by large increases in public access and visitor pressure on the site since 2015. Because more people are now visiting the Ghyll there have been some adverse impacts on habitats and there is an increased need for on-site Ranger input.

The impacts of exceptionally high visitor numbers that were first seen in 2020 may continue into the future. This should be anticipated and appropriate measures put in place through the management plan.

The key management themes recommended for the five-year period from 2021 to 2025 are:

- A new, strategic approach to managing paths and access to the LNR
- Grassland and grassland edge habitat management
- Invasive plant species control, mapping and monitoring
- Strengthening community engagement to help reduce site abuses
- Woodland and hedgerow management
- Survey and monitoring of wildlife

The following management actions are recommended in order to make progress towards meeting the site management objectives.

### 3.3.1 Paths & Access

#### 3.3.1.1 Strategic Access Plan

New paths have appeared in almost all parts of the Ghyll since 2015. Some are direct routes into the LNR from the new housing developments on the western side of the site, others are “desire lines” that cross blocks of woodland or provide access to the gill stream. Many paths in the woodland become muddy in wet weather so people try to avoid the worst sections by diverting into adjoining vegetation on drier ground. As paths widen and new paths form they begin to join up and form a network of new routes around the site. These can soon become favoured routes for regular visitors.

The more paths there are through the Ghyll, the fewer quiet, undisturbed areas there are available for wild fauna to take refuge from people and their dogs. Animals including nesting birds, dormice, reptiles, deer and fox are all vulnerable to disturbance and are likely to be adversely affected by a loss of undisturbed habitat.

Excessively worn paths also have a direct, adverse physical impact on woodland soils. Ground flora, including Bluebells and Wood Anemones, are an important feature of the gill stream area and Jeffreys Wood but these plants cannot survive on heavily trampled ground. Nor can compacted soils absorb water effectively which means that surface water run-off and erosion can be exacerbated, especially where there are worn paths on steep slopes.

In order to prevent serious and long-term damage to the semi-natural habitats and rare species of the Ghyll it is vital to devise and adopt a strategic plan for access around the whole LNR. This should be a very high priority action because once visitors have become familiar with new paths and routes around the site it will become increasingly difficult to dissuade people from using them.

A pragmatic approach will be needed. Some of the most well-used new routes provide local residents with a direct way to reach existing public rights of way. These paths could be accepted and formalised. Simultaneously the use of less practical paths or ones that encourage access to previously quiet parts of the site should be strongly discouraged. Every effort must be made to prevent any additional new paths from opening up.

It will be a matter of judgement for the Ranger to decide on which paths can realistically be formalised and which can be effectively discouraged. The many paths that have developed alongside and crossing the gill stream are of particular concern since the trampling and compaction is likely to have an adverse impact on sensitive plant communities. There has been significant loss of vegetation in places on the gill banks and erosion of the banks is apparent in places. For this reason compartment 8 is one of the key areas in which to focus path management and restrictions. Ideally this compartment should be an area for minimal intervention apart from INNS control and tree safety work.

There are new and heavily used paths from Nassau Drive into the western part of the Ghyll which could continue to proliferate and become a major problem. These are in urgent need of rationalisation but nevertheless there is some logic to these routes. Some extend across the site from west to east via compartments 6b, 6, 8 and 12 to join the public footpath in compartment 11 whilst another major path runs northwards through compartments 6b and 6 to join the public footpath in compartment 5.

A single route from Nassau Drive into the Ghyll should be formalised and signposted along with the main paths that link to public footpaths. The route from compartment 6 to compartment 12 crosses the gill stream and considerable erosion of the stream banks is evident at this point. As part of formalising this route a new footbridge should be installed to avoid further damage to the fragile stream banks. All the other minor paths in this area should be blocked using dead hedging or felled timber to actively discourage their use.

Having decided on an acceptable path network some new, low-key way-marks should be installed within the LNR, updated site maps put onto the interpretive boards and a self-guided trail leaflet should be produced.

Usually when ponies are grazing compartment 13b, in the east of the LNR, the gate from the grassland sports pitches on Palesgate Lane is kept closed to keep the ponies in and visitors with dogs away from the rather inquisitive Koniks. It is recommended that a short length of new fencing is installed to provide a year-round access route directly from the sports pitch grassland to the public footpath in compartment 11.

A line for this new fence should be cleared by cutting back woody vegetation including Holly and Bramble in compartment 13b parallel to the existing fenceline of compartment 15. Great care should be taken to avoid damaging the grassland sward of compartment 13b.

It is recommended that, as far as possible, the access strategy discourages any increase in visitor levels in compartment 14 because this is currently a relatively quiet area of woodland without direct access to other parts of the CTC landholding.

### 3.3.1.2 Path Enhancement

Improving the quality and year-round accessibility of public rights of way and the main paths across the site will help to encourage visitors to keep to the agreed path network in the Ghyll.

The surface of the east-west Public Footpath in compartment 5 is very slippery in places and also suffers from localised erosion. This could be improved to make it safer and much less slippery by applying a top dressing of crushed sandstone in the wettest areas and by some selective Holly felling along the path edges to increase light and airflow. Small, timber steps could also be installed in places if appropriate. Small drainage cuts next to the path edges may help to divert water away from the path surface and could reduce the speed and volume of surface water run-off that affects this route at times of heavy rain. The impacts of any drainage cuts on erosion and whether path widening is reduced during wet weather should be monitored carefully.

The eastern section of the same Public Footpath in compartment 11a is very steep and also suffers from erosion. Improvement of this section could include the selective removal of young trees and scrub management along the path edges in order to increase light reaching the ground and promote drying. Steps could be

installed in the steepest sections using minimum ground disturbance techniques with small diameter logs derived from woodland management work. Experimental small drainage cuts could also be tried on this slope to reduce the amount of surface water run-off down the path.

There is a metal kissing gate at top of the Public Footpath where compartments 11 and 13a meet. The function of this access point needs to be reviewed because at present a large gap next to the kissing gate makes it redundant.

The north-south Public Footpath that runs through compartment 11 would benefit from some small-scale path edge management to increase light reaching ground level and promote better vegetation growth. Selective removal of young Oaks and coppicing small amounts of old, leggy Gorse is recommended alongside the path to form shallow scallops. However, any management work to enhance the Public Footpath should be gradual and small-scale to avoid opening up any more new, informal paths in addition to those that have already appeared on the previously undisturbed slope below.

The ongoing, low-key woodland management of path edges within the wooded parts of the Ghyll by selective coppicing and minor tree works should continue as necessary.

### 3.3.2 Grassland & Grassland Edge Management

Active management of wildlife-rich grassland habitats is crucial to maintain their botanical value and high levels of biodiversity. The two main areas of valuable grassland habitat at the Ghyll are Jubilee Meadow (compartment 1b) and the Palesgate Lane grasslands (compartments 13a and 13b). These have been managed since 2015 by mowing and by livestock grazing respectively. The amenity grassland around the play area in Jubilee Meadow compartment 1a is mown regularly during the growing season to maintain a short sward and this should also be continued in future.

Autumn pony grazing in compartments 13a and 13b has been both ecologically successful and popular with visitors to the Ghyll. This should be continued in the same way over the next five-year period.

The species-rich grassland sward of Jubilee Meadow should continue to be managed by an annual cut with arisings collected. Mowing can be timed to suit seasonal conditions but usually from mid to late July onwards is considered a good guideline for unimproved lowland meadows. However, now that the basic meadow management routine is established there is scope to fine-tune the mowing regime.

In the southeastern part of Jubilee Meadow the sward is gradually becoming more coarse and appears to have a higher proportion of tussocky grasses and fewer low-growing wildflowers than in the past. This could be a result of a management regime that does not include any aftermath grazing, which is currently considered impractical in this part of the Ghyll. Livestock grazing after cutting a hay meadow helps to break up any thatch and reduces the height of grassland vegetation before growth stops in winter. Tussocky grasses are less likely to thrive under such management.

It is recommended that for the first two years of this management plan the sward in the southeastern part of Jubilee Meadow should be cut twice per year (in April and August) to help reduce the dominance of coarse plant species. The effects of this more nuanced mowing regime should be monitored carefully and managed adapted or changed depending on the impacts observed.

The main species-rich areas of Jubilee Meadow should always be mown annually to prevent any scrub encroachment, control tussocky grasses and maintain wildflower diversity. However, the edge habitats could be managed differently over the next five years in order to increase the diversity of conditions for fauna across the compartment and provide valuable over-wintering habitat for invertebrates.

Long grass margins should be retained around the meadow edges and under the mature Oak trees on a two-year rotation in September/early October. These should be mown on a two-year rotation so that there is always some tall grass habitat present. Rotational management of the scrub around the meadow edges is also very important to prevent the woody vegetation from encroaching into the grassland in places.

The first area of scrub to tackle in compartment 1b should be along the southern edge of the field where sections of woody vegetation should be cut back to the fence line during the winter months. This will promote more vigorous growth and a more diverse age structure around the edges of Jubilee Meadow.

Jubilee Meadow has very good potential to be used as a source of wildflower seed or green hay for grassland enhancement projects elsewhere in Crowborough. Advice on techniques for seed harvesting and the use of green hay are available from the High Weald Unit at <http://www.highweald.org/look-after/weald-meadows-network.html>

The vegetation in the newly restored glade in compartment 11a should be cut and removed on a 2-3 year rotation to maintain it as an open but structurally diverse habitat. Targeted, rotational management of the scrub edges and removal of young trees that establish in the open area is also recommended.

The species-rich grassland areas adjacent to Palesgate Lane to the east of compartment 13 are owned by CTC but are not formally part of the Ghyll. These flowery meadows surrounded by mature hedgerows nevertheless provide very rich supporting habitat to the LNR. They are managed in a pragmatic and sympathetic way that aims to balance the ecological value of the grassland with its use for more formal recreation and sport.

### 3.3.3 Invasive Native and Non-native Species (INNS) Control

There has been considerable success in reducing the extent of some key INNS within the Ghyll since 2010. However, the control and removal of non-native and potentially invasive plant species remains one of the most important management activities for the duration of this management plan.

The species to target and control techniques set out in the 2015 management plan are largely unchanged. In summary the key techniques recommended are cutting back woody species with follow-up herbicide treatment where necessary, manual control of annual or non-woody plants and targeted herbicide treatment of Japanese Knotweed by stem injection.

A high priority action for 2021 should be to update the 2010 map of the location and extent of invasive species on the whole site. This will require targeted survey work during the field season.

The following INNS were noted during the 2020 site assessment but this is not a comprehensive picture of their extent across the site.

- Cherry Laurel *Prunus laurocerasus* (compartments 3, 5, 7 and 8)
- Wilson's Honeysuckle *Lonicera nitida* (compartment 5 and 8)
- Garden Privet *Ligustrum ovalifolium* (compartment 5 in new glade area)
- Bamboo *Pseudosasa japonica* (compartment 10 at TQ53476 30106)
- Indian Balsam *Impatiens glandulifera* (compartments 7, 8 and 14)
- Japanese Knotweed *Reynoutria (Fallopia) japonica* (near the gill stream in compartment 8)
- Mature Cotoneaster shrub *Cotoneaster sp.* (compartment 11b at TQ53216 30759 near the southern end of the new glade)
- Montbretia *Crocsmia x crocosmiiflora* and Snowberry *Symphoricarpos albus* (western edge of compartment 14)

The Ranger routinely controls Bracken and Bramble on the edges of compartments 13a and 13b by hand during the growing season. The extent of these species should be reduced a little further in compartment 13b to avoid loss of valuable grassland sward.

### 3.3.4 Community Engagement & Rubbish Removal

#### 3.3.4.1 Community Engagement

Continuing the high levels of positive community engagement at the Ghyll that have been established by the Ranger is essential. Considerable progress has been made to involve, educate and engage local people since 2015 but significant amounts of new housing adjoining the LNR inevitably increases the risk of anti-social behaviour and detrimental impacts on the site.

There are numerous garden gates that open directly into the LNR from adjoining properties, especially along the edge of compartment 8 from Bracken Close and Medway but there are also some into compartment 14 from Green Lane. These direct access points can be relatively low-impact but they become a problem when there is associated dumping of garden waste and encroachment onto CTC land.

One property on Medway has a large garden/small-holding that cuts into the woodland adjoining compartments 7 and 8 (see site map). The correct boundary of this property is unclear as there are several different fences but a considerable amount of garden waste nearby seems to have been dumped on CTC land.



Clear communication with all the householders concerned is very important and if necessary enforcement action to prevent incursions into the LNR should be taken as a last resort.

### 3.3.4.2 Rubbish Removal

Litter and rubbish removal are ongoing management tasks for the Ranger and there is still some old, potentially dangerous wire fencing in parts of the LNR that should be removed. During the 2020 assessment the following items were noted and should be prioritised for removed if possible:

- Old dormouse nest boxes in compartment 6
- Old conservation area signs in compartment 6
- Old barbed wire on the woodbank in compartments 6 and 6b
- Old wire fence and car parts (TQ53153 30626) in compartment 7
- Old rabbit fencing and metal debris in compartment 14

There is some old wire fencing in compartment 8 but where this is not a danger to visitors it could be retained to help discourage access to the stream. Only unsafe sections should be removed.

The boundary between compartments 11 and 13 includes both old and new wire fences. If resources allow then the old, defunct fencing should be extracted to leave just the intact stock-proof fence.

### 3.3.5 Woodland, Scrub & Hedgerow Management

The amount of woodland management that can be carried out in the Ghyll over the next five-year period will need to be responsive to visitor pressure and community response. It is possible that normally routine woodland management activities which have ecological benefits, such as coppicing and thinning, will have the unwanted consequences of encouraging greater access into previously quiet areas or of encouraging vandalism.

The primary woodland management task that is recommended during this plan is to create a new glade in the west of compartment 5 where the footpath enters the LNR. This will require some clearance and coppicing of trees and scrubs around the edges of an existing clearing where an unsafe, large Beech tree has been felled. A number of garden shrubs occur in this part of the site and the glade creation work can be combined with their control.

Once the new glade has been created its outer edges should be stock-fenced in strategic places to help discourage the proliferation of informal paths in this area and encourage use of the public footpath.

A new LNR interpretive board with a map of the main paths around the Ghyll could be installed in the glade as part of the strategic access plan. Rotational management of the vegetation within the open part of the glade and on its margins will be needed to maintain a diverse and structurally complex habitat.

Routine trimming of the hedgerow along the northern edge of compartment 1 in alternate years should be continued. The reduced frequency of management has successfully enhanced the wildlife value of this site boundary.



*Hedgerow and edge vegetation in compartment 1*

The mature, species-rich hedgerows around and between the Palesgate Lane meadows should also be managed by low-key, rotational trimming to maintain them as dense, diverse features with a high degree of habitat connectivity.

At the southern tip of Jubilee Meadow, where the path enters compartment 3, scrub on the path edges should be trimmed back occasionally during the growing season. This will help to keep the path open and ensure enough light and circulating air reaches the ground to dry the path surface. Alternatively the scrub could be cut further back from the path during the winter months to reduce the amount of trimming needed during the growing season.

Overall a default policy of minimal intervention should be adopted in most woodland areas, especially around the gill stream and wet woodland areas. However, invasive species management will still be needed in most areas.

Small scale, selective thinning of Holly is useful to increase light levels and promote natural regeneration of other woody species. It has been carried out successfully in Jeffreys Wood and elsewhere but should only be continued where the risk of increasing levels of access and vandalism is considered minimal.

The area of dense Holly in compartment 15 should be left as a minimal intervention area for the duration of this five-year plan.

Consideration should be given to gradual, selective removal of conifers in compartment 14 in order to promote natural regeneration of broadleaved woodland. This should only be carried out if it does not increase access to this part of the Ghyll and some mature conifers should be retained to provide valuable habitat for birds.

### 3.3.6 Survey & Monitoring

Fixed-point photographic monitoring of the Ghyll should be continued. Other biological surveys and monitoring work, for example butterfly transects, moth trapping and reptile surveys, are highly valuable and should continue whenever volunteer expertise and resources allow.

Ideally vegetation surveys of compartments 6b and 14 (acquired since 2015) should be carried out during the spring months to assess the woodland ground flora. This would supplement the data that was collected in summer 2020 during the habitat assessment.

A site-wide survey of INNS is needed to inform the mapping and control programme of invasive species on the LNR.

Re-starting the dormouse surveys in the Ghyll in order to re-join the National Dormouse Monitoring Programme (NDMP) is highly desirable but this depends on having areas where nest boxes can be installed safely and remain undisturbed. A decision on this aspect of site monitoring may be possible once the strategic access plan has been implemented.

More biological information about the newly acquired compartment 14 would be very useful to help direct its future management. Carrying out a breeding bird survey and possibly a dormouse nest tube survey should be considered in this area if resources allow.

### 3.3.7 Land Acquisition

CTC should continue to make efforts to acquire any parcels of undeveloped land adjacent to the Ghyll that become available. In particular any of the woodland on the eastern edge of the LNR adjoining Green Lane or in the southwest adjacent to Palesgate Lane would be high priority targets.

Consolidating the Town Council's landholding and protecting these valuable areas of contiguous semi-natural habitat would be hugely beneficial for the wildlife of The Ghyll and for the local community.

## References

- Barry Kemp Conservation (2013). Herpetofauna Survey of Four Sites in Crowborough for Crowborough Conservation.
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- Dolphin Ecological Surveys (2010b). Dormouse Survey of Crowborough Ghyll SSSI and Crowborough Country Park LNR. Unpublished report to Crowborough Town Council
- Dolphin Ecological Surveys (2012a). Land at Palesgate Lane, Crowborough. Winter Work Plan 2012/13. Unpublished report to Crowborough Town Council
- Dolphin Ecological Surveys (2012b). Crowborough Threatened Species Project. 2011 – 2012 Dormouse Survey of Crowborough Ghyll SSSI. Unpublished report to Crowborough Conservation
- Dolphin Ecological Surveys (2015). Crowborough Ghyll Management Plan 201 – 2019. Unpublished report to Crowborough Town Council
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## The Ghyll Five-year Action Plan 2021 to 2025

MANAGEMENT TASK	TIMING	2021	2022	2023	2024	2025
<b>PATHS &amp; ACCESS</b>						
Develop a strategic access plan that identifies acceptable routes in addition to public rights of way (PROW)	ASAP	✓				
Formalise one route from Nassau Drive and a path across the gill from west to east: <ul style="list-style-type: none"> <li>Enhance the east/west PROW in compartment 5 with crushed sandstone, small drainage cuts, selected felling and small steps</li> <li>Enhance the east/west PROW in compartment 11a with small drainage cuts, selected felling and small steps</li> <li>Modify the kissing gate access point</li> <li>Install a new footbridge across the stream</li> </ul>	ASAP depending on time and resources	✓				
Install waymarks on acceptable routes, revise site maps on interpretive boards & produce a self-guided trail leaflet	When the strategic plan is complete	✓	✓			
Create a new, fenced path between compartments 13b and 15	November to February	✓				
Discourage additional access to compartment 14	All year round	✓	✓	✓	✓	✓
Selectively remove young Oaks and create scallops in Gorse along the north/south PROW in compartment 11	November to February		✓	✓	✓	✓
Continue low-key path edge management through woodland areas	November to February	✓	✓	✓	✓	✓
<b>GRASSLAND &amp; GRASSLAND EDGE MANAGEMENT</b>						
Pony grazing in compartments 13a and 13b	Autumn	✓	✓	✓	✓	✓
Cut & collect in Jubilee Meadow leaving uncut margins	Late July onwards	✓	✓	✓	✓	✓
Cut & collect southeastern corner of Jubilee Meadow	April & August	✓	✓			

MANAGEMENT TASK	TIMING	2021	2022	2023	2024	2025
Review mowing regime in southeastern corner of Jubilee Meadow	September			✓		
Cut & collect 50% of tall grass margins around Jubilee Meadow	September/October	✓	✓	✓	✓	✓
Cut approximately 20% of scrub margins around Jubilee Meadow	December to February	✓	✓	✓	✓	✓
Cut & collect 30-50% of vegetation in compartment 11a glade	October/November	✓	✓	✓	✓	✓
Cut sections of edge vegetation and remove selected young trees on rotation in compartment 11a glade	December to February	✓		✓		✓
Mow grassland in compartment 1a as necessary	April to October	✓	✓	✓	✓	✓
<b>INVASIVE NATIVE &amp; NON-NATIVE SPECIES CONTROL</b>						
Carry out a targeted survey to allow updated INNS mapping	May/June	✓				
Remove Indian Balsam, Montbretia and Bamboo by hand	May to July	✓	✓	✓	✓	✓
Remove woody species such as Cherry Laurel, Wilson's Honeysuckle, Garden Privet and Snowberry with herbicide follow-up if necessary	November to February	✓	✓	✓	✓	✓
Treat Japanese Knotweed with herbicide by stem injection	July to late September	✓	✓	✓	✓	✓
Pull, break and crush Bracken stems as they emerge	May onwards	✓	✓	✓	✓	✓
<b>COMMUNITY ENGAGEMENT &amp; RUBBISH REMOVAL</b>						
Engage with householders who have gates into the LNR to discourage encroachment and dumping of garden waste	All year round	✓	✓	✓	✓	✓
Check and formalise the "small holding" boundary adjoining compartment 8. Engage with the landowners to remove dumped waste	ASAP	✓				
Remove large waste items and old fencing from compartments 6, 7 and 14	ASAP	✓	✓			
Rationalise old fencing between compartments 11 and 13	When resources allow			✓		



MANAGEMENT TASK	TIMING	2021	2022	2023	2024	2025
<b>WOODLAND, SCRUB &amp; HEDGEROW MANAGEMENT</b>						
Create a new glade in compartment 5: <ul style="list-style-type: none"> <li>Remove INNS &amp; coppice edge</li> <li>Fence margins</li> <li>Install an interpretive board</li> </ul>	Winter/spring	✓				
Manage vegetation in and around the new glade on rotation	November to February		✓	✓	✓	✓
Trim hedgerow on the north edge of Jubilee Meadow	November to February	✓		✓		✓
Trim hedgerows around Palesgate Lane Meadows on a low-key rotation as necessary for safety and to maintain good edge habitats	November to February	✓	✓	✓	✓	✓
Manage scrub edges on the path between Jubilee Meadow and compartment 3	Either trim small amounts regularly or cut further back in winter	✓	✓	✓	✓	✓
Minimal intervention in most woodland areas apart from INNS control		✓	✓	✓	✓	✓
Consider light thinning of Holly where adverse risks are low	November to February		✓		✓	
Consider gradual thinning of conifers in compartment 14	November to February			✓		✓
<b>SURVEY &amp; MONITORING</b>						
Fixed-point photographic monitoring at regular intervals		✓	✓	✓	✓	✓
Continue to encourage and support volunteer biological surveys	As appropriate	✓	✓	✓	✓	✓
Vegetation survey of compartments 6b and 14	April/May	✓				
INNS survey and mapping	June/July	✓				
Consider replacing Dormouse nest boxes for the NDMP				✓		
Breeding bird and dormouse nest tube surveys of compartment 14	As appropriate		✓			
Review the management plan	Autumn					✓

## **APPENDIX**

# **Habitat & Management Assessment of Crowborough Ghyll LNR 2020**

## **Introduction**

The unique circumstance of 2020 have had a profound impact on local open spaces and nature reserves across the country. Many sites have seen dramatic increases in the number of visitors and overall footfall during the coronavirus pandemic lock-downs and through subsequent restrictions when many more people were working or learning from home.

Crowborough Ghyll LNR is no exception and it is impossible to predict whether the high levels of visitor pressure seen during the summer of 2020 will continue or if there will be a return to somewhat lower visitor numbers in the future.

The Ghyll is an important greenspace where local people can exercise and enjoy wildlife, but it also supports rare species and fragile habitats. Its management over the next five years will need to be both flexible and targeted to ensure that neither its value to people nor its ecological importance are compromised.

In June and August 2020 Kate Ryland (Dolphin Ecological Surveys) visited Crowborough Ghyll LNR to carry out a habitat and management assessment of the site. Daniel Colborne, the CTC Ranger, also attended a June site visit to discuss management of the Ghyll.

During the site visits each compartment was assessed for any changes that have occurred since the last ecological survey was carried out in 2010. The progress that has been made and outcomes of management activities at the Ghyll since the 2015 were also assessed and discussed with the CTC Ranger.

The management compartments are described below and Figure 3 shows the approximate location of key features observed and recommendations arising from the assessment. The assessment results were used to inform the recommendations contained in the 2021 to 2025 site management plan.

## **Habitat & Management Assessment of Compartments in the Ghyll**

### **Compartment 1**

Compartment 1a is a small area that contains play equipment and picnic benches in the north of Jubilee Meadow. It is managed by regular mowing as an amenity area.

Compartment 1b is the largest and most ecologically important part of Jubilee Meadow. It comprises species-rich, largely unimproved grassland which is a threatened and declining habitat of high value to wildlife (referred

to as Lowland Meadow Priority Habitat). Overall the grassland sward in Jubilee Meadow appears to be in good condition with regularly mown paths that help to keep visitors on selected routes around the field.



*View of Jubilee Meadow*

Optimising grassland management within the LNR, particularly management of this valuable meadow, has been a focus for the CTC Ranger since 2015. Purchasing equipment to collect flail-mown grass from the meadow has allowed much greater control over the time of cutting, which is very important to maintain its botanical interest. It is still not considered viable to remove cut material from the site so the solution has been adopted of depositing the arisings within areas of scrub on the meadow margins where they will rot down fairly quickly. This is still not ideal but it is preferable to the previous practice of stacking large round hay bales around the field edges because the bales are extremely slow to decompose.

Jubilee Meadow would benefit greatly from some form of livestock grazing during the autumn months after the sward has been cut. Mowing in the absence of aftermath grazing tends to allow a short, uniform layer of thatch to build up and does not create the same small scale disturbance features that result from the action of grazing animals. However, this management recommendation does have significant practical constraints because the meadow is not stock-fenced and there is no piped water supply. There may also be concerns over the high level of visitors in this part of the LNR. Nevertheless it should remain a management aspiration in case it becomes possible to overcome the constraints in the future.

There are some parts of Jubilee Meadow where the grassland sward is less flowery and contains a higher proportion of coarse species and tussocky grasses, especially around the edges and under the mature Oaks in the centre of the field. The southeastern corner of the meadow also appears to be developing a slightly more tussocky sward.

Most of the grassland edges adjoin scrub and woodland habitats. Without management any woody species, particularly Blackthorn *Prunus spinosa* and Willow *Salix spp.*, will tend to encroach into the meadow. The rotational management of scrub on the margins of Jubilee Meadow should be a priority for the next

management cycle to ensure there is no reduction in extent of valuable grassland habitat or loss of sward diversity.



*Scrubby edge habitat in Jubilee Meadow*

Management of the scrubby edges by cutting back sections on rotation will also create a more diverse age structure within the scrub. The rotation should start at the southern end of compartment 1b where the mixed scrub that includes Blackthorn and Willow has extended out some distance from a fence line. The central part of this scrubby area is quite leggy and would benefit from being cut back to the fence to promote new growth and thicken the scrub margin.

One of the mature, open-grown Oak *Quercus sp.* trees within compartment 1b had dropped a very large limb in August 2020. Where it is possible and safe at least some of the fallen timber should be retained under the canopy of the tree to provide deadwood resources for specialist wildlife.

The surface of the path leading from the meadow into the woodland of compartment 3 has been greatly improved in recent years by the addition of locally sourced crushed sandstone but the scrub edges still encroach onto this important path. More regular cutting back during the growing season or cutting back further in winter is needed.

## Compartment 2

Compartment 2 encompasses the northern part of the gill stream and its wooded fringes and appears to be little changed since the previous survey. There are signs of human and canine access to the stream in places but on the whole the dense scrub and Bramble *Rubus fruticosus* help to keep most of this compartment relatively free of disturbance.

## Compartment 3

Compartment 3 is an area of ancient woodland that encompasses the eastern stream bank and Jeffreys Wood east. Jeffreys Wood is known to support dormice and was the location for most of the NDMP nest boxes.

Light touch management on the path edges by selective coppicing alongside the gill stream has been carried out very successfully in accordance with the management prescriptions from 2015. There are still some Cherry Laurel *Prunus laurocerasus* shrubs in this compartment that should be removed under the INNS control strategy.

Within Jeffreys Wood a considerable amount of debris has been cleared by the Ranger and an area of dense Holly *Ilex aquifolium* has been thinned. This has opened the canopy and increased light reaching the woodland floor, which will promote the growth of ground flora and natural regeneration of woody species.

This block of old Hazel *Corylus avellana* and Ash *Fraxinus excelsior* coppice would benefit from a re-introduction of traditional, rotational coppicing. Unfortunately the current visitor pressure probably poses an unacceptable level of risk of greater disturbance to wildlife and vandalism if coppicing took place.



*Very trampled ground in coppice in compartment 3*

The greatly increased footfall in the Ghyll during 2020 was evident as quite extensive areas of bare and trampled ground along the main path and on the stream banks in this part of the LNR. Human access to all of Jeffreys Wood east has also increased significantly since 2015 with multiple new paths, a “camp” and increased amounts of new litter in this previously less-visited area.

## Compartment 4

Compartment 4 comprises generally wet, secondary woodland and scrub on the lower slopes to the west of the gill stream. These areas appear relatively unchanged since 2015 although there are a few more informal paths where the ground is driest.

## Compartment 5

Compartment 5 encompasses the public footpath from Green Lane into the Ghyll as far as the gill stream and its immediate surroundings. This is the only public right of way into the LNR from the west and is thus subject to considerable access pressure.



Parts of this footpath have a surface of old laid brick/cobble but much of the route down the steep slope to the gill stream is unsurfaced. In wet weather the path can be very slippery and often becomes waterlogged during the winter months. Surface water run-off tends to channel down the footpath which has caused localised erosion in the unsurfaced sections.

Visitors to the LNR naturally attempt to avoid walking on the slippery, muddy or eroded sections of the footpath, which has caused quite extensive trampling of vegetation and compaction of the ground to either side of the path. In order to prevent the pathway becoming increasing wide and eroded some remedial work to the path surface and its drainage is recommended.

A large Beech *Fagus sylvatica* at the western entrance to the LNR had to be felled for safety reasons. This has opened the canopy and provides a good opportunity to create a new glade. Several INNS (Wilson's Honeysuckle *Lonicera nitida*, Rhododendron *Rhododendron ponticum*, Garden Privet *Ligustrum ovalifolium* and Laurel) occur in this area, which adjoins domestic gardens. These shrubs could be removed as part of the glade creation work.



*Felled Beech and location for a new glade*

A new interpretive board could be installed in the glade to welcome visitors to the Ghyll and provide information about the site.

## Compartment 6

Compartment 6 is an ecologically important area of diverse Hazel coppice with patches of damp woodland in the south where it adjoins compartment 7. Dormice have been recorded in this area in the 15 nest boxes that were installed as part of the development mitigation associated with Nassau Drive. These boxes are now in poor condition and are subject to vandalism so should be removed.

Since 2015 there has been a greatly increased level of public access into this compartment directly from Nassau Drive and the impact on this formerly quiet and largely undisturbed area of woodland is severe. The visitor footfall in compartment 6 is likely to have increased even further in 2020 during the coronavirus restrictions.



A major new path has been created on the southern edge of compartment 6 which leads straight down the valley side to the gill stream. The upper parts of the path are particularly trampled with extensive bare, compacted ground and some trees and shrubs on the margins have been cut back to widen the route.



*New path in compartment 6*

This path crosses the old north-south woodbank that bisects compartment 6 and forms the boundary between compartment 6b and compartment 7 (see Figure 3). Woodbanks are features of historic interest as part of the woodland archaeology of the Ghyll. They are also of ecological value and may support a distinct bryophyte flora and be rich in small mammal burrows. There are multiple strands of old barbed wire fencing along parts of the wood bank which now pose an increased safety risk as more people and dogs use this part of the Ghyll. These should be removed where possible.



*Path from Nassau Drive*

A second major new path runs parallel to the woodbank in the upper parts of compartment 6 linking the main public footpath from Green Lane to Nassau Drive via compartment 6b. This path and a smaller off-shoot path that cuts down to the gill stream are also very trampled and have attracted litter and piles of dumped material.

## New Compartment 6b

This woodland parcel has been acquired by CTC since 2015 as part of a Section 106 Agreement associated with the nearby development. Most of it comprises a mixture of Oak *Quercus robur*, Ash, Silver Birch *Betula pendula*, Holly and Hazel with frequent Bramble. This type of structurally diverse and high quality habitat is likely to be of particular value to dormice.

Unfortunately this area of valuable habitat within the Ghyll is particularly vulnerable to adverse impacts on its flora and fauna from increased disturbance by people and dogs, trampling and compaction of woodland soils and high levels of predation on native small mammals and birds by domestic cats.



*Old sign and lampshade dumped in compartment 6a*

The signboards indicating a “conservation area” in compartments 6 and 6b that were erected by the developers have been vandalised and should now be removed.

## Compartment 7

Compartment 7 is an interesting area of damp scrub and woodland with substantial wet flushes on the mid-slopes, parts of which are still quite impenetrable and undisturbed despite its proximity to the new housing of Nassau Drive to the west.

The upper slopes support a tangle of Bramble scrub with stands of Bracken *Pteridium aquilinum* and there are large, dense stands of Indian Balsam *Impatiens glandulifera*. This INNS has been the subject of targeted control efforts annually since 2015 with some success in containing its extent but ongoing control work is essential to prevent Indian Balsam spreading to other parts of the Ghyll.





*Indian balsam in compartment 7*

The mid- and lower slopes of this compartment are more wooded with a mixture of Willow, Birch, Hazel, Rowan *Sorbus aucuparia*, Ash and Oak with occasional Cherry Laurel. The ground flora in the wettest areas is dominated by sedges including large stands of Remote Sedge *Carex remota*. There is a natural glade with dense young Ash and Willow regeneration in the north of compartment 7 where a large, mature Grey Willow *Salix cinerea* has collapsed.



*Wet woodland in compartment 7*

Unfortunately there is also some rubbish and old wire in this compartment which should be removed. Parts of a car were noted in the south near the gill stream and there is an old wire fence that extends along the southern boundary of the compartment from the corner of the large garden/smallholding (see compartment 8 notes).



*Car parts in compartment 7 wet woodland area*

The upper slopes of compartment 7 partly adjoin the land that has been added to the CTC landholding/the Ghyll LNR since 2015, the new compartment 6b (see Figure 3).

## Compartment 8

Compartment 8 encompasses much of the gill woodland on both banks of the stream in the southern part of the LNR. The western boundary of compartment 8 adjoins housing on Bracken Close and Medway. At the southern end of compartment 8 near the car park (compartment 9) there is an interpretive board and a sunny, open glade which has a dense stand of Raspberry on its northern edge.



*Glade and interpretive board*

Near the car park on the eastern bank of the stream there is a very popular and easily accessible area dominated by mature Beech trees. Here the ground is extremely trampled, there are several tree swings and the stream banks have quite extensive eroded areas with little vegetation.





*Rope swing and compacted ground in compartment 8*

A stand of Japanese Knotweed *Reynoutria japonica* is present on the stream bank in compartment 8 and is subject to annual control work by the Ranger.

The western side of compartment 8 is considerably changed from its state in 2015. At that time the steep slopes to the west of the gill were quite undisturbed and largely inaccessible to visitors but did suffer from serious, localised waste dumping from adjacent properties. Now a new, very well-worn path now runs northwards from the glade along the top of the slope near the garden boundaries. Additional worn paths branch off downslope to the gill stream where several rope swings have been put on tree branches that overhang the stream. Some quite severe trampling and loss of vegetation is evident in places on the stream banks.



*Path on the west of compartment 8*

Access gates and steps have been constructed from the gardens of numerous properties directly into the Ghyll and waste dumping on the LNR is still prolific in places. This antisocial behaviour ranges from compost heaps to bricks, glass and builders rubble.

At one point at the top of the bank there is quite a major informal access point to the LNR from near the junction of Bracken Close and Medway. Here a tree swing has been built and a warning sign, nailed to a tree, states that the area is monitored by CCTV.



*Damage to trees in compartment 8 and access point to the LNR*

Near the junction with compartment 7 a large garden/small-holding extends into the gill woodland and occupies much of the western valley side. There are several old fences, considerable amounts of garden waste and a very ill-defined boundary between CTC land and the adjoining property along this part of compartment 8.



*Fencing and waste piles in compartment 8*

On the lower slopes of the stream there is an area of mature, fruiting Hazel with Silver Birch and Holly where deadwood is frequent. This area appears to be high quality habitat for dormice.

Cherry Laurel and Indian Balsam are scattered along the gill and up this western side of the stream valley. Together with a stand of Wilson's Honeysuckle that is present near the top of the slope, these species should be included in the INNS control programme.



## Compartment 9

Burdett Road car park occupies the whole of compartment 9. It has been upgraded since 2015 and is now fenced and surfaced, providing a popular and well-used entrance to the Ghyll LNR.

Dense, tall vegetation of Hogweed, Nettle, Hedge Bindweed and Bramble has been encouraged to grow along the fence that separates the car park from the gill stream. This appears to be very effective in unobtrusively discouraging access directly to the stream from the car park.



*Dense vegetation on the edge of the car park*

## Compartment 10

There is a stand of Bamboo *Pseudosasa japonica*, a non-native and potentially invasive species, next to a large Oak tree near the top of the western slope of compartment 10 (near the car park fence). This should be removed as part of the INNS control strategy.



*Worn area in compartment 10*

There is a short, trampled path leading from compartment 8 into a small clearing in compartment 10 with a fallen trunk where some rubbish has accumulated. The rest of this small compartment appears to be relatively intact though it is likely to accumulate litter as it is very close to housing, the road and the car park.

## Compartment 11

Compartment 11 is a diverse area divided into three zones without distinct boundaries. These are 11a in the north, the Bracken-dominated slopes of 11b and the more wooded area and public footpath of 11c.

One of the key actions for the 2020 management plan is path improvement work on the main public footpath from Palesgate Lane to Green Lane, part of which runs along the northern edge of compartment 11a. This heavily used section of the public footpath is steep, narrow and very shaded. Although the ground on this west-facing slope of the Ghyll is quite sandy in places, there are signs that in wet weather parts of the footpath become waterlogged and muddy.



*The public footpath looking east from near the gill*

Selective felling of the dense young, Oaks that line much of the footpath and cutting back scrub and Bramble alongside the path would increase light in and help to dry the ground. Log steps could be installed on the steepest sections of the path using techniques that involve limited ground disturbance and material derived from woodland management. This would make the path easier to use and may also help to slow the surface water run-off that has eroded deep channels in places.

At the top of the slope there is a metal kissing gate which is rarely used because of the large gap to its side.





*Kissing gate on the public footpath*

A new glade was created in compartment 11a between 2015 and 2019 by removing young trees from an area of tussocky grassland. This has developed into an excellent mosaic habitat of tall herb, grassland and scrub which is likely to provide very good habitat for fauna such as reptiles, invertebrates and small mammals. Woody re-growth in the glade is vigorous and rotational management will be needed to maintain this structurally diverse area in optimum condition.



*View of the glade*

There is a large Cotoneaster shrub near the junction of sections 11a and 11b which should ideally be removed because this species can be very invasive and is easily spread via its berries, which are very palatable to birds.

Compartments 11b and 11c on the west-facing slope above the gill stream include the Bracken-dominated area, where some small trial areas have been raked free of dead fern litter, along with Gorse scrub, scattered trees and an area of secondary woodland in the south.



*Bracken at the top of the slope*

A limited amount of management has taken place in these areas since 2015 apart from experimental raking of some Bracken patches. The public footpath along the upper slope is gradually narrowing and becoming increasingly shaded by young Oaks and Gorse scrub. The sandy path surface shows signs of erosion in places and the site of a small fire in the Gorse has also exposed bare, sandy soil.

Selective removal of young Oaks along the path edges combined with some small-scale, rotational management of Gorse to create scallops along the path edges is recommended. This will increase light levels and promote better field layer vegetation growth to help consolidate the soil and also help to create a more diverse age structure in the Gorse scrub. Alongside compartment 11b the path edge has good examples of an intact field layer in open conditions as well as eroded bare ground under young Oaks.



*A relatively open section of the path*

The livestock fencing between compartments 11 and 13 includes some redundant wire and posts, which could be rationalised when time allows.



## Compartment 12

Compartment 12 is an area dominated by dense Holly that has been thinned to create a small glade on its western edge. A new and very well-used path that has developed through this area is directly linked to the new paths through compartments 6 and 6b from Nassau Drive.



*New path through compartment 12*

## Compartment 13

Compartment 13 comprises species-rich grassland adjacent to Palesgate Lane that is outside the Ghyll LNR boundary but wholly within the LWS. The entire block of grassland between compartment 11 and Palesgate Lane is owned by CTC but the eastern fields that are closest to Palesgate Lane have a primary function for recreation and sports use, despite also having high levels of biodiversity.

The western fields (compartments 13a and 13b) are considered to be part of the nature reserve and are managed solely for their ecological value. In autumn the grassland in compartments 13a and 13b is grazed by ponies, which are supplied by a local grazier.

Compartment 13a is the larger of the pony grazed fields. In 2020 its sward was in good condition despite being very parched and a new mixed, native hedgerow that has been planted along its eastern edge is developing into an excellent habitat.



*Grassland and young hedgerow in compartment 13b*

The most botanically valuable grassland areas are in compartment 13b and these appeared to have suffered some deterioration since 2015, probably due to a combination of drought conditions, high numbers of rabbits and increased footfall. These factors are likely to have contributed to the widened path, sparse and parched sward with large numbers of scrapes and bare sandy patches.



*View of compartment 13b*

Bracken has also spread into more of this compartment than in 2015 but there are still some high quality fragments of acid grassland in the north.

The edge habitats around the whole of compartment 13 and the grassland to the east include mature hedgerows, Bramble scrub, Bracken and mature trees. Together they form an important habitat network with a high degree of connectivity that is likely to be very important for a range of fauna such as nesting birds, dormice, foraging bats, reptiles and small mammals. The careful, rotational management of these edge habitats is crucial to maintaining their high ecological value.





*Structurally complex and rich edge habitat*

Bracken is locally abundant on the edges of compartments 13a and 13b and is subject to manual control during each growing season. Dense Bracken can provide useful shelter and basking habitat for adders, which are present in this part of the Ghyll. However, compartment 13b contains important fragments of unimproved, acid grassland vegetation on the thin, sandy soils, and so the extent of Bracken should be restricted.



*Bracken and acid grassland on a slope in compartment 13b*

The southern part of compartment 13b is a fenced area of dense Holly which would be better considered as a separate management unit. It has been renamed 15 in the new management plan. There is stock-proof fencing around compartments 13a and 13b but it would be useful to provide a new, fenced route for visitors to the LNR who gain access from the grassland to the east and the sports pitches. This would encourage people into the LNR who are reluctant to enter the fields when the ponies are present.

A mixture of Holly and Bramble scrub currently extends into compartment 13b from compartment 15 and this woody vegetation should be cut back so that a new fence can be erected parallel to the current compartment

boundary. The path could run between the two fences with a kissing gate or stile to provide access into compartment 13b. This work should be carried out with care to ensure that only woody vegetation is cleared for the new fence and that valuable grassland sward is not affected.

CTC have adopted a pragmatic approach to the management of the eastern fields to achieve a compromise between their value for formal recreation and sports with their undoubted importance for wildlife as flowery grassland with mature, dense hedgerows and the robust habitat connectivity around the whole area and to the wider countryside beyond.



*Grassland near Palesgate Lane managed for both sports and wildlife*

The majority of eastern grassland areas are treated as hay meadow and mown annually but the area required as a sports pitch is mown more frequently. Crucially the sports pitch is not treated with herbicide or pesticide which means that the grassland retains a high botanical interest within the short sward and even represents useful complementary short grassland habitat to the taller, less frequently mown meadow sward.

## New Compartment 14

Compartment 14 has been acquired by CTC since 2015 and is an ecologically significant addition to the Ghyll. It is a sizeable block of diverse, wooded habitat that also functions as an important buffer between housing on Green Lane and the gill stream habitats to the east. Because of the timing of its acquisition this compartment falls outside the Local Nature Reserve boundary but is within the Crowborough Ghyll Local Wildlife Site.

Within this compartment there are areas of conifer plantation and of broadleaved woodland. The conifers are concentrated in the central and southern parts of compartment 14 whilst the northern parts support predominantly broadleaved species. An informal path leads into compartment 14 from the public footpath in compartment 5. This path winds through the woodland and continues beyond the CTC boundary into an adjoining area of woodland to the north. Small woodland camps and minor paths indicate that children play in this area but levels of disturbance appear to be relatively low at present.



*Camp in compartment 14*

Mature and immature conifers of mixed species occur in almost pure stands over a sparse, ferny field layer. Scattered conifers are also present in the predominantly broadleaved areas where Ash, Hazel, Beech, Oak, Holly and Birch occur over a ground flora that includes Enchanter's Nightshade *Circaea lutetiana*, Nettle *Urtica dioica*, Bramble, Broad Buckler-fern *Dryopteris dilatata* and Bluebell *Hyacinthoides non-scripta*. The conifer plantation appears to have been largely unmanaged in recent years and it is gradually being colonised by native, broadleaved trees and shrubs.

The western edge of this compartment adjoins properties on Green Lane and there are a few well-used paths from some of these gardens into the Ghyll. Garden plants that can be considered INNS were noted in places near this boundary including Montbretia *Crocasmia x crocosmiiflora* and Snowberry *Symphoricarpos albus*. These, and the scattered Indian Balsam present in this area, should be included in the INNS control programme.

The springs and flushes on the valley sides that are evident in compartments 4, 6 and 7 also occur in compartment 14. There are some distinct wet flushes along the western edge and a ditch across the centre of this area.

There is abundant fallen deadwood present, which is a valuable resource for wildlife. The dense and structurally complex vegetation combined with relatively low levels of disturbance make this area potentially important for woodland fauna such as dormice and nesting birds.

Along the western edge of compartment 14 there is an area of dense Bramble scrub with scattered, mixed broadleaved species with the remains of an old rabbit fence embedded in the ground. This chicken wire fence should be removed if possible, along with the other bits of metal debris that are present in the vicinity, although it may prove difficult to unearth some sections of the fencing.





*Old, embedded rabbit-proof fencing*

A full vegetation survey of this area and mapping of its INNS should be carried out in spring to allow a better assessment of the ground flora component than was possible in summer 2020. Whilst compartment 14 does not appear as ancient woodland on the revised Ancient Woodland Inventory, it nonetheless appears to support a diverse flora. There is also potentially good dormouse and bird-nesting habitat in this area, which means that targeted faunal surveys should be considered.

Management of compartment 14 should aim to keep it as a relatively quiet and undisturbed area on the western side of the Ghyll. The gradual removal of a proportion of the conifers to encourage natural regeneration of broadleaved woodland is also recommended but should take lower priority than managing the amount of visitor access.



**Figure 3**  
**Crowborough Ghyll**  
**Habitat Assessment Sketch Map**  
**2020**

