

Countryside and Rights of Way (CROW) Act 2000

NOTICE OF RELEVANT AUTHORITY DECISION FOLLOWING CONSULTATION ON A PROPOSED LONG-TERM RESTRICTION OF CROW ACCESS RIGHTS

Prepared by Natural England

Access Authority: Sefton Borough Council
Relevant Authority: Natural England
Local Access Forum: Merseyside, Halton & Warrington
Consultation began: October 21st 2016
Consultation ended: December 2nd 2016

1. Case Reference Numbers.

Land Parcel Name	Direction Ref.	Reason for Restriction
Ainsdale Sand Dunes National Nature Reserve	2013086907	Land management (s24)
Ainsdale Sand Dunes National Nature Reserve	2014017038	Nature Conservation (s26)
Cabin Hill National Nature Reserve	2013086900	Land management (s24)
Cabin Hill National Nature Reserve	2014017039	Nature Conservation (s26)

Natural England, as the relevant authority, has now decided how to proceed following the consultation on its proposal to exclude access for people with dogs under Section s26(3)(a) of Countryside and Rights of Way Act (CROW).

Our decision is to revoke two directions and vary two directions restricting CROW access in the way we originally proposed.

2. Comments received during the consultation.

We received no comments during the consultation period.

3. Why is a restriction necessary?

The management plan (April 2012 to April 2017) has indicated that the management being undertaken within the fenced enclosures has been extremely successful in nature conservation terms.

“Grazing has resulted in large areas within the enclosures being dominated by short turf and an increase in bare sand patches favouring natterjack toad. The main areas of nature conservation gain from the dune restoration areas have been in early successional species, notably natterjack toad, and higher plants such as yellow bartsia, seaside centaury, and smooth cat’s-ear”.

As Natural England’s dedication project progressed the focus around the nature conservation interest on National Nature Reserves changed, from focusing solely on

designated features, to taking into account the wider conservation purposes of the respective sites. As a result we looked wider than the notified features, considering management measures to cover a wider suite of flora and fauna interests.

In addition, since the original restrictions have been in place, other studies have been undertaken in relation to the management of dune systems and the impacts of grazing and non-grazing by primary and secondary graziers on their ecosystems.

These studies considered that any potential change to extent and patterns of public access by people with dogs in these areas raises particular concerns about the following potential effects on habitats and species:

- Changes to the grazing regimes caused mainly by dogs disturbing the livestock and other graziers on the dune systems;
- Loss of area of designated features due to a succession towards more mature vegetation within dune systems;
- Impacts on natterjack toad populations caused mainly by dogs accessing breeding pools causing spread of disease and death of eggs and toadlets / newtlets due to silt deposition and trampling; and
- Trampling of sensitive features causing damage and destruction.

Details of these sensitivities on the National Nature Reserves and the supporting evidence are in Appendix 1.

Therefore, we considered that in light of the change in position in terms of balancing access against the nature conservation objectives of National Nature Reserves included in the dedication programme and the further studies undertaken, Natural England identified areas that required some form of intervention.

4. What is the lowest level of restriction necessary?

Natural England, in its role as the relevant authority and relevant advisory body, has to balance nature conservation concerns with access opportunities.

After due consideration, we believed that access for people with dogs within the current restricted areas may have an impact on internationally, nationally and locally important flora and fauna features. Therefore, Natural England considered that public access rights to parts of the National Nature Reserves should be restricted by direction under s26(3)(a) of CROW, for the purpose of conserving the nature conservation interests of the land in question.

Therefore, Natural England considers the lowest level of restriction necessary is no access rights:

- To the fenced enclosures at both Ainsdale Sand Dunes National Nature Reserve and Cabin Hill National Nature Reserve to people with dogs. These restrictions would operate all year.

5. Conclusions following Consultation.

Land Parcel Name	Direction Ref.	Reason for Restriction	Details for new direction
Ainsdale Sand Dunes National Nature Reserve	2013086907	Land Management (s24)	Direction Revoked
Ainsdale Sand Dunes National Nature Reserve	2014017038	Nature Conservation (s26)	No access rights to people with dogs. This direction would operate all year.

Cabin Hill National Nature Reserve	2013086900	Land Management (s24)	Direction Revoked
Cabin Hill National Nature Reserve	2014017039	Nature Conservation (s26)	No access rights to people with dogs. This direction would operate all year.

Natural England, as the relevant authority, will revoke the two directions under s24 and vary the two directions under s26, to restrict access to people with dogs all year, for the following reasons:

- The directions for land management are no longer required now that we have reassessed the situation.
- To assist in Natural England delivering the outcomes in the Government's Biodiversity Strategy 2020 in particular, for the Sefton Coast, Outcome 1 – Habitats and ecosystems on land, and the conservation objectives of the European and UK nature conservation designations.
- Due to the sensitive nature of this particular area, informal management measures are not sufficient to protect the vulnerable features.
- Grazing offers the most cost and time effective option for sustainable provision of bare sand, slack formation, and protection of habitat within the fixed dune area.
- The usage of the fenced enclosures by primary and secondary graziers will help maintain the dune system in a physical mobile state, with landward movement of dunes and the creation of new dune slacks. Allowing dogs into the grazed areas can alter grazing patterns and hence threaten condition;
- There have been a number of dog attacks on livestock on the National Nature Reserves resulting in an impact on the grazier's livelihood. A decline in grazing animals and livestock through the presence of dogs may increase the stabilisation of the mobile dunes and succession towards a more mature vegetation;
- The presence of natterjack toads results in these areas being much more susceptible to disturbance from CROW access rights.
- Natterjack toads are extremely vulnerable to disturbance by dogs running through the ponds.
- The amount of available access land on the National Nature Reserves following the open access dedications in 2013 has increased to walkers and responsible dog walkers.

Appendix 1: Ecological Sensitivity

Coastal Dunes

The area of coastal dunes in Europe has declined by 40% since 1990 and one third since the late 1970s (EUCC, 1993)¹.

Most of the Sefton Coast dunes were surveyed, using the NVC in 1998/9 and again in 2003/4. The results can be summarised as follows:

Comparing the two surveys reveals some worrying trends. One of the most species-rich fixed-dune communities (SD8) has undergone a dramatic 90% reduction from about 100 ha to 10 ha. Equally striking has been the change in the open dune annual community (SD19) from 150 ha to less than 4 ha (a 97% loss), though some of this change may be due to the way the maps were drawn, many small patches of SD19 being unrecorded. The 9% reduction in dune slack communities (SD13-17) from 112 ha to 102 ha is also a matter for concern, the main loss being the younger slack types. Coupled with these changes, there has been an increase in non-sand-dune neutral grassland communities in less disturbed areas from 11 ha to 160 ha.

The reason for these trends, which have taken place in only 15 years, are probably complex and are not yet fully understood. However, one important factor seems to be the build-up of nutrients in the soil due to scrub invasion, lack of grazing and deposition of pollutants (mainly nitrogen) from the air (Smith, 2009)².

The fixed dunes are an important habitat for natterjack toad and the site's vascular plant assemblage; therefore, any reduction in the size, quality or continuity of the habitat is undesirable as it will impact the integrity of the Special Area of Conservation (SAC). The Conservation Objectives for the SAC identify that 20-25% of the fixed dune habitat within the European site should be grazed. The SSSI is currently classified as being in unfavourable to recovering condition, with the target of being in a favourable condition by 2020.

Grazing on the NNRs has resulted in large areas within the enclosures being dominated by short turf and an increase in bare sand patches, favouring natterjack toad populations. Maintaining open dune habitat without grazing requires costly and labour intensive scrub removal.

Evidence that intervention is beneficial is also demonstrated at Birkdale, where the botanical interest in the Birkdale frontal dunes has increased, showing a 42% gain over the last 20 years and an 80% increase in nationally and regionally notable plants since the first survey (Smith, 1983³).

The research undertaken by others would indicate that the diversity of many dune areas has developed due mainly to a long history of grazing by rabbits and domestic stock. Research has also shown that cessation of grazing by rabbits has led to marked changes in the vegetation structure of UK dunes. The short rich sward has changed to tall grass and tall herb communities. This leads to a succession towards more mature vegetation.

Maintaining habitat features in good condition is achieved by using cattle and sheep which graze the dunes to maintain a "short turf", and by rabbits who are the primary producers of bare sand within the increasingly over-vegetated semi-fixed and fixed dune areas due to digging. Rabbits also have a significant grazing role in maintaining other habitat features in

¹ EUCC. 1993. European coastal conservation conference, 1991. Proceedings. EUCC, the European Union for Coastal Conservation, The Hague/Leiden, the Netherlands.

² Smith; Philip H. 2009. The Sands of Time Revisited: An Introduction to the Sand Dunes of the Sefton Coast. Amberley, Gloucestershire.

³ Smith, P. H. 1983. Ecology and Management of Birkdale Frontal Dunes, Merseyside. Unpublished. Report to Sefton Metropolitan Borough Council. Bootle.

good condition, including the dune slacks. Rabbits are highly selective graziers, preferring the “short turf” and at moderate densities they can produce mosaics of different vegetation (Alexander C. Lees and Diana J. Bell, 2008⁴). These techniques complement each other as rabbits are often dependent on large herbivores to maintain the short vegetation they prefer (Hilary Ford et al, 2012⁵).

Small herbivores, such as rabbits, graze preferentially in areas with increased food quality; this can be due to effects of localised dunging from other, larger animals. Rabbits can help define habitat characteristics, where large grazers are removed; keeping patches of grassland fairly open without causing compaction. However, since rabbits are often dependent on large herbivores to maintain the shorter vegetation, their effects may not persist. Indeed, research suggests that once rabbit populations crash due to disease, they do not recover in sufficient time to resume their previous impact.

Plassmann et al. (2010⁶) summarise similar effects observed on Welsh dune systems:

“Prior to the outbreak of myxomatosis, dunes in Wales were often swarming with rabbits and their grazing and scratching had a profound influence on the vegetation. The resulting reduction in grazing pressure gave rise to conditions much more suitable for scrub invasion and the proliferation of coarse grasses.....Nevertheless, rabbits have been an important component of Welsh sand dunes for at least the last 900 years but today the distinctive lichen and moss rich dune grassland they create is restricted to just a handful of sites such as Aberffraw and Morfa Dinlle. For this reason, we have provisionally selected a number of sites that will be encouraged to develop in to modern day ‘rabbit warrens’, and as part of this strategy, a programme of rabbit re-introductions is being considered. However, under present conditions it is unlikely that rabbit grazing alone could maintain open grasslands.”

Research undertaken has concluded that *“Long-term grazing management can play an important role for the conservation of dune communities and associated species. Because of its positive effects on species diversity, plant communities and habitat condition in sand dunes, livestock grazing is recommended for conservation management!”* (Plassmann et al, 2010).

A threat to many dune systems is that they are more vegetated than they have been for centuries. This leads to increased stability and development towards scrub and woodland vegetation with an associated loss of species diversity (Westhoff 1989⁷; Houston 1997⁸). In the past and as late as the 1970s and 1980s, dune management has focussed on attempts to stabilise dunes; however, “we now understand that dunes are sensitive environments, rather than fragile ones....erosion and bare sand are essential components of a healthy, dynamic dune environment of high conservation value” (Rooney and Houston, 2009)⁹.

⁴ Lees, AC. & Bell, DJ. 2008. A conservation paradox for the 21st century: the European wild rabbit *Oryctolagus cuniculus*, an invasive alien and an endangered native species. *Mammal Review*. Volume 38, No. 4, 304–320.

⁵ Hilary Ford, H, Garbutt, A, Jones, DL & Jones, L, 2012, *Impacts of grazing abandonment on ecosystem service provision: Coastal grassland as a model system*. *Agriculture, Ecosystems and Environment* 162, 108– 115.

⁶ Plassman, K, Jones M.L.M & Edwards-Jones G. (2010). Effects of long-term grazing management on sand dune vegetation of high conservation interest. *Applied Vegetation Science* 13: 100-112

⁷ Westhoff, V. 1989. Dunes and dune management along the North Sea coasts. In: van der Meulen, F., Jungerius, P.D. & Visser, J. (eds.) *Perspectives in coastal dune management*. pp. 44-51. Proceedings of the European Symposium Leiden, September 7-11, 1987, The Netherlands. SPB Academic Publishing, The Hague, NL.

⁸ Houston, J. 1997. Conservation management practice on British dune systems. *British Wildlife* 8: 297-307.

⁹ Rooney, Paul & Houston, John. 2009. From Wasteland to Joy Land – Changing Attitudes to Coastal Dunes. *Ecos - A Review of Conservation*; volume 30, issue 2, page 50.

Natterjack Toads

In 2002, the natterjack toad population on the Ainsdale NNR was estimated to comprise a minimum of 400 breeding adults, while a small population of natterjacks is also found at Cabin Hill. The Ainsdale NNR population can form up to 20% of the UK natterjack toad population while the Sefton Coast population as a whole can form up to 40% of the UK population.

The habitat of the natterjack toad is vulnerable to succession towards scrub and woodland. Through the ongoing dune restoration project at Ainsdale, scrub removal and grazing projects are now increasing areas of suitable habitat and the natterjack populations in these areas have developed from non-existent to levels as good as or possibly higher than the other dune areas on the NNR. Natterjacks are also vulnerable to replacement by common toad where rank vegetation and semi-permanent water bodies are present. Breeding pools are vulnerable to destruction by *Crassula helmsii* and possibly damage by other introduced waterweeds while they remain on the site. At Cabin Hill, natterjack numbers are constrained by a lack of dune slack development in the mobile dune area.

The Ribble and Alt Estuaries Ramsar, under criterion 2, supports up to 40% of Great Britain's population of natterjack toads.

Edgar (2002)¹⁰ considers amphibians generally immune to most public access effects during their terrestrial lives, but the necessity for all species to utilise ponds for breeding purposes exposes them to a greater range of pressures. Because adult natterjack toads are nocturnal and spend the day within burrows (often >20 cm deep), Edgar considers impacts from human disturbance, even from trampling by humans or grazing animals, to be minimal. He even suggests that trampling may sometimes be beneficial in maintaining areas of open sand. It is the breeding season that disturbance effects may occur for this species. They prefer temporary ponds and the shallow water means their spawn is vulnerable, especially to dogs running through the ponds. Dogs entering the pools disturb the silt which then rests on the spawn strings leading to the development of a fungus *Saprolegnia* spp (A. Kimpton *pers. comm.*). Dogs running through the water also take spawn strings with them and may drink tadpoles, particularly if the water table drops. People visiting the pools at sites such as Ainsdale can tread on emerging toadlets in early summer (Edgar, 2002, Kimpton *pers. comm.*).

The original research identifies the following types of sites as those with particular vulnerability to access related issues:

- Sites with access routes close to key breeding sites, basking areas or foraging areas for natterjack toad;

The new evidence essentially supports the original research. Pools used by breeding natterjacks are typically shallow, often temporary pools in dune systems or heathland. There is evidence that dogs swimming in such sites can have an impact and therefore concludes that restrictions relating to dogs on leads (thereby preventing dogs accessing water-edge habitats) may be necessary on sites where natterjack toads are present.

Additional new material comes from the UK Biodiversity Action Plan (BAP). In 2005, lead partners involved in the UK BAP were asked to report on their species and habitats. The reporting included identifying current or emerging threats. Two species, natterjack toad and sand lizard are cited as having current threats potentially relating to access. Edgar (2002) considers amphibians generally immune to most public access effects during their terrestrial lives, but the necessity for all species to utilise ponds for breeding purposes exposes them to a greater range of pressures. Because adult natterjack toads are nocturnal and spend the

¹⁰ Edgar, P. (2002). The effects of public access on amphibians and reptiles. an assessment of the potential effects of increased public access due to the introduction of the countryside and rights of way act 2000. (ed[^] (eds. CCW Contract Science, Bangor).

day within burrows (often >20 cm deep), Edgar considers impacts from human disturbance, even from trampling by humans or grazing animals, to be minimal. However they are vulnerable in the breeding season. At this time they prefer temporary ponds and the shallow water meaning their spawn is vulnerable, especially to dogs running through the ponds. Dogs entering the pools disturb the silt which then rests on the spawn strings leading to the development of a fungus *Saprolegnia* spp (A. Kimpton *pers. comm.*).

In the late 1970s, Cabin Hill contained the largest concentration of natterjacks on the Sefton Coast. Since that time, the population has greatly declined, with several factors responsible for this. Natterjack breeding activity was concentrated in the artificially created slacks, which initially provided ideal conditions. The slack floors were bare sand, and few other vertebrates or invertebrates used the water bodies. However, more recent colonisation by invertebrate predators of tadpoles, a very large common toad population and the development of rank vegetation, particularly in the slacks, have all contributed to the decline in the natterjack population.

At Ainsdale NNR, however, the area of suitable habitat for natterjacks increased by 22.5 ha between 1999 and 2004, and the level of competition from common amphibians also reduced through habitat and species management. In the 10 year period up to 2004, the average number of emerging toadlets each year was logscale 3 - 4 (100s to 1000s).

The Species Recovery Programme Conservation Handbook for the natterjack toad identifies two critical elements of habitat structure that are essential for natterjacks to thrive on dunes.

1. Mobile dunes with extensive areas of bare sand but with some vegetation cover to support invertebrate prey and to provide cover for toads to burrow under. (Over-stabilised dunes or scrub are unsuitable habitat for natterjacks and encourage colonisation by common amphibians).
2. Aquatic habitat, typically in the form of shallow ephemeral slacks that desiccate around midsummer; especially those near the frontal ridges which tend to be the most poorly vegetated and so have the lowest number of tadpole predators.

The reasons for the historic decline of the natterjack toad on the Sefton Coast are linked to loss of habitat due to fragmentation caused by afforestation and urban development, collecting, recreational pressures, reduction in grazing by rabbits and natural succession to fixed-dune/dune-scrub in situations where new embryo dunes are not being formed. Most of these factors have affected the population on the NNR. Groundwater levels, dictated by the amount of rainfall after interception and evapotranspiration, affect the number of breeding pools available each year.

The Sefton Coast Natterjack Toad Strategy and Biodiversity Action Plan continues to take these factors into consideration. The strategy provides a co-ordinated approach aimed at maintaining a chain of breeding sites along the coast to preclude the isolation of populations. Most of these are excavations and can be retained, some with re-profiling to prevent them being fully permanent, or reduced in area to enable better management, and managed by periodic mowing and collecting or relining to maintain suitable natterjack breeding habitat.

The prescriptions of the Strategy for the NNR will continue to be implemented. Broadly these are site safeguard, maintaining the NNR monitoring programme and dune restoration and grazing projects to improve/increase areas of suitable habitat and reduce/eliminate competition from common amphibians.

Natterjack spawn and tadpoles are vulnerable to human interference, by direct removal by children, and through dogs being allowed or encouraged to enter the water. The current restriction has helped to minimize this problem within available staff resources, with the support of natterjack interpretation signs placed at key locations to deter public interference.