

KONG MINI MOUNTAIN MARATHON SERIES
2019 LANGDALE EVENT – ECOLOGICAL BRIEFING NOTE

Kong Mini Mountain Marathon events are located in Britain's greatest upland areas that often contain features of outstanding biodiversity value and importance. Occasionally, the features that provide this interest can be vulnerable to the wear and tear that may result from the passage of event competitors. The risk of ecological damage is carefully assessed during early stages in the planning process for each event, when every effort is made to avoid sensitive ecological interest areas that could be disturbed by the event.

We are keen to encourage personal route selection choices by our event competitors to further avoid the risk of local ecological disturbance. This Ecological Briefing Note has been prepared for the 2019 Kong event to identify key ecological interest features that contribute to the special character of the event area, with route selection comments to help minimise the risk of localized ecological disturbance.

The 2019 Kong Langdale event area includes some key areas of upland landscape character and quality in the Lake District central fells area. In particular, this comprises the dissected lava-plateau landscape of the Lower Borrowdale Volcanic Group rocks that create a distinctive rugged upland landscape. The varied geology, glaciated landforms and generally upland character of the area has produced a diverse assemblage of nature conservation interest features.

A variety of distinctive upland wildlife habitats and vegetation types are present within the 2019 Kong event area. These include one area of International nature conservation importance, and three areas of National nature conservation importance. Participants will need to cross some of these areas while completing individual courses, potentially passing through various types of upland habitat.

- **Dry acid grassland** is a widespread vegetation type within the event area, where centuries of livestock grazing has converted heather moorland to open grassland. These areas provide a relatively robust vegetation type that can generally withstand the trampling effects of fell running.
- Extensive areas of dry acid grassland can include **mosaics of other upland vegetation** types such as blanket bog, heather-dominated heath vegetation and wet acid grassland creating areas of local vulnerability to a concentration of trampling by Kong competitors. Vegetation mosaics can be of interest to **ground-nesting birds**, and as a consequence, care should be taken to avoid nest disturbance when crossing these areas. Use of existing paths where possible will help to minimise the risk of nest disturbance.
- **Blanket bog** is an important feature at several locations within the event area. Some of these areas contain degraded blanket bog where bog vegetation has been lost and peat erosion gulleys (peat hags) have formed where and the underlying peat is being eroded.
- Disturbance of **blanket bog** by runners churning through peat hags has the potential to trigger further peat erosion by de-stabilising the peat surface. Wherever possible, route choices in these areas should try to link strips and patches of surviving moorland vegetation between the peat hags. These are often quite well-drained, providing areas of relatively robust vegetation and resistant to the trampling effects of running.
- Some locations on plateau landforms within the event area contain patches of high quality blanket bog with an intact vegetation surface that lack peat erosion features. These are typified by areas of wet heath vegetation interspersed with shallow pools, often associated with *Sphagnum* mosses. These areas often comprise a mosaic of vegetation types that will include slightly **raised areas of better drained peat with drier heather moorland vegetation**. These will be far less vulnerable to disturbance through vegetation damage by trampling and should ideally be selected when making route choices for running through these intact blanket bog areas.

- Areas of **wet acid grassland** will be encountered on courses where impeded drainage occurs within relatively level hill grassland areas or where groundwater emerges at the surface as seepages across more steeply sloping ground. Wet acid grassland can be of special nature conservation interest, in particular where groundwater seepages provide conditions for communities of specialised mosses, liverworts and other specialised plants. These vegetation types can be vulnerable to persistent disturbance effects of trampling and should ideally be avoided wherever possible by selecting routes that keep to dry acid grassland to by-pass wet grassland patches.
- **Wet acid grassland** at groundwater seepages on steep ground can be difficult to avoid where they cross valuable contouring lines. Avoidance of these areas could involve significant deviation from the desired contour running level. Despite this, it would be ideal if damage to seepage zone vegetation could be minimised, often located within shallow gulleys, re-entrant features or associated with ground level rock outcrops that cross steep slopes.
- On hillsides, soil movements within **dry and wet acid grassland** areas can develop well-defined micro-terrace systems, often referred to as sheep walks or trods. These typically follow contours and can provide extremely useful running lines. Grassland vegetation at the edge of these micro-terraces is often friable and easily broken off. Care should be taken when using these features for contouring to avoid running on the edge of these terraces to minimise grassland damage.
- Distinctive **semi-natural woodland** of very high conservation interest is present towards the margins of the event area, including important broadleaved woodland habitats within steep-sloping ravine landforms associated with upland streams and rivers. Many of the broadleaved woodlands are of great importance for the mosses and liverworts that grow on tree trunks and boulders on the woodland floor. The microclimate of ravine woodlands often maintains vegetation comprising highly specialised mosses, liverworts and other plants.
- The **woodland moss and liverwort communities** are fragile features that could be easily disturbed by Kong competitors. When routes require competitors to cross woodland sites it is important that existing paths are used. Routes that negotiate steep-sided, wooded ravines should be avoided.
- A variety of **boulder field and scree habitats** are present within the event area that are potentially vulnerable to disturbance. Ice-shattered boulder fields on the highest mountain tops often support fragile montane grass-heath plant communities of extremely high nature conservation value. Wherever possible existing paths through these areas should be used to minimise disturbance of these communities. Blocky scree often supports specialised plant communities that utilise the microclimate of sheltered spaces within the scree. Kong routes that cross these features should use existing paths where possible and should always minimise disturbance of scree blocks.
- Specialised **rock ledge plant communities** are present at a number of locations within the event area. If Kong competitors need to negotiate low rock outcrops great care should be taken to minimise disturbance of ledge vegetation.
- The event area has a number of **hill tarns** that provide valuable upland nature conservation features. Often this interest is associated with complex and specialised vegetation areas that develop at the margins of both large lakes and smaller hill tarns. There is no need for Kong competitors to enter any water body within the event area, and all lake and tarn margins should also be avoided.
- The event area contains a complex network of **streams and rivers**, some of which are potentially vulnerable to ecological disturbance from repeated crossing by runners. Some of the rivers within and surrounding the event area are covered by very high level nature conservation designations, including watercourses that could support internationally and nationally threatened animal species such as **otter** and **water vole**. In many cases, the nature conservation interest of these rivers and streams concerns use of the banksides by these animals. As a consequence, great care should be taken by Kong competitors at stream crossings, minimising bank disturbance when entering and climbing out of stream channels.

- The 2019 Langdale event will take place towards the beginning of the **upland bird nesting** season. Many notable upland birds are ground nesting species and could have nests at locations throughout the upland semi-natural grassland, heath and bog habitats that comprise the majority of the event area. Great care should be taken to avoid disturbance of ground nesting birds and trampling damage to bird nests while accessing event controls away from established hill paths.