KONG MINI MOUNTAIN MARATHON SERIES 2020 BORROWDALE/LANGDALE EVENT – ECOLOGICAL BRIEFING NOTE

Kong Mini Mountain Marathon races 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 competitors' personal route selection choices on our events that further avoid the risk of local ecological disturbance. This Ecological Briefing Note has been prepared for the 2020 Borrowdale/Langdale 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 localised ecological disturbance.

The 2020 Borrowdale/Langdale event area is located within the central fells region of the Lake District National Park, an area of igneous geology comprising distinctive Borrowdale Volcanic rocks. The character of the event area landscape is strongly influenced by glacial action, creating a variety of distinctive ice scoured valley systems with glacial moraine deposits on lower slopes and ice-shattered boulder fields on the highest mountains.

A variety of distinctive upland wildlife habitats and vegetation types are present within the 2020 Borrowdale/Langdale event area. These include three areas of International nature conservation importance, and seven areas of National nature conservation importance. Existing hill paths are available for passing through parts of the Borrowdale/Langdale event area, helping to avoid the risk of disturbance to sites and features of special nature conservation interest. For situations where competitors might be required to pass through areas of land not crossed by hill paths this ecological briefing note should support personal route choices that will avoid the risk of significant ecological disturbance. This ecological briefing note has also been produced to communicate the special upland environmental interest of the event area to enrich the experience of participating in the Borrowdale/Langdale event.

- **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 hill 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 Borrowdale/Langdale competitors. Upland 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 as the Borrowdale/Langdale event takes place during the bird nesting season. 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 comprise 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 bare peat 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.
- In contrast to areas of degraded **blanket bog**, some locations on plateau landforms within the event area contain patches of high-quality blanket bog with an intact vegetation surface that lack eroding peat hags. 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 and acid grassland vegetation. These will be 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 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, other
 specialised plants and often for scarce invertebrates. 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 a significant route change and deviation
 from the desired contour 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 microterrace 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 within the event area, including broadleaved woodland within steep-sloping ravine landforms associated with upland streams and rivers. The microclimate of ravine woodlands often maintains vegetation comprising highly specialised mosses, liverworts, other plants and invertebrates that utilise tree trunks and boulders on the woodland floor as habitat.
- The Borrowdale/Langdale event generally avoids the need to pass through or in close proximity to key areas of upland semi-natural woodland interest. However, where competitors need to cross woodland areas, it is important that existing paths are used.
- 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. Existing paths through these areas should be used wherever possible to avoid disturbance of these communities. Blocky scree often supports specialised plant communities that utilise the microclimate of sheltered spaces within the scree. Any competitors who need to cross these features should always minimise disturbance of scree blocks.
- Specialised **rock ledge plant communities** are present at a number of locations within the event area. If competitors need to negotiate low rock outcrops great care should be taken to minimise disturbance of ledge vegetation.
- The event area has a substantial number of **lakes and hill tarns** that are generally of considerable nature conservation interest. 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 Mini Mountain Marathon competitors to enter any water body within the event area, and all lake and tarn margins should 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 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 competitors at stream crossings, preferring the use of bridges and stepping stones to minimise bank disturbance when entering and climbing out of stream channels.