Characterisation of a basin mire in the Azores archipelago

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SUMMARY

The Azores archipelago in the North Atlantic is an extremely important area for biodiversity because it is rich in rare species and habitats, and almost undisturbed. The Lagoa do Madruga is a small basin mire located at 956 m a.s.l. on Santa Bárbara Mountain, Terceira Island. It is an extremely good example of a peatland type that was first discovered in 1998, and has not previously been described in the international literature. This paper provides baseline information on its flora, vegetation communities, structure and hydrology. Thirty-one plant species including eight *Sphagnum* species and nine endemic vascular plants have been recorded, and four plant communities are distinguished. The maximum peat depth is three metres. The mire receives flowing water from its margins and from a small stream entering at its eastern end, in addition to intercepted precipitation and fog. The accumulated water forms pools and soakways which feed other wetlands downstream. The conservation status of the mire is good, but it is subject to increasing pressure from garbage generated during maintenance operations at a nearby antenna array.

KEY WORDS: European Habitats Directive, North Atlantic, peatland vegetation, surface hydrology.