

**LINKING RAISED WATER-LEVELS TO EFFECTIVE CONSERVATION MANAGEMENT IN LOWLAND WET GRASSLANDS.**

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Control of water-levels in ditches has been employed in British Environmentally Sensitive Areas as a method of maintaining the conservation value of lowland wet grassland. In addition, an attempt has been made in three ESAs to Enhance the wildlife interest of such communities through the raising of ditch water-levels e.g. winter levels at mean field-level and summer levels at no more than 30-45 cm below field level. A research programme, including experimental (field and laboratory), survey/monitoring and modelling approaches, has tested the impact of these water-management prescriptions. Beginning in 1994 at Tadham Moor in Somerset (UK), an experiment was conducted to test the impact of raised water-levels on botanical composition. By 1996, there was evidence of species-loss from the grassland under raised water-levels, and by 2000, there was little evidence of recruitment of new obligate wetland species. These findings are linked to a predictive modelling framework, and compared with other raised water-level site in English ESAs.