



Case Study 9.1 Control of invasive sedges

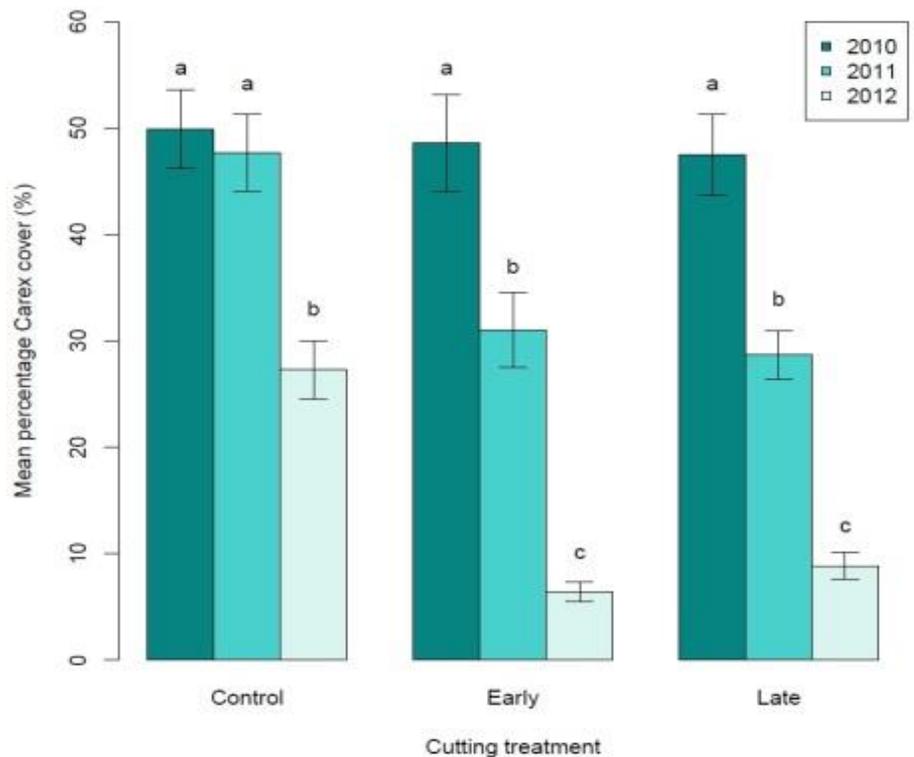
Invasive sedges, such as slender tufted-sedge and lesser pond-sedge, have been identified as problems on floodplain meadows in the UK and across western Europe as they reduce species diversity and decrease the quality of the hay crop. They are more tolerant of waterlogged soils than many other floodplain-meadow species, and can become established following a series of wet summers.

Newman (2013) looked at the effectiveness of a double-cut treatment in controlling these sedges, together with the effects of this treatment on the wider plant community. Potential mechanisms regulating the spread of these two species were also investigated. Field trials were set up to monitor the effects of the cutting treatment and pot experiments were undertaken to assess the effects of cutting on plant behaviour.

Findings

- A double cut successfully controlled both slender tufted sedge and lesser pond-sedge on floodplain meadows.
- The frequency of the cutting treatment was more important than the timing of the additional cut.
- Flowering in slender tufted-sedge was significantly decreased by cutting twice.
- The timing of the cuts had no significant effect.

Figure 9.3 Differences in response of slender tufted-sedge and lesser pond-sedge from varying cutting regimes (Newman 2013). Control equates to a single cut in each year, an early cut equates to cutting in May and again in July and a late cut equates to a cut in June and again in August.





Recommendations for controlling slender tufted-sedge and lesser pond-sedge⁴⁰

- Cut the vegetation in mid June and again at the end of August if field conditions allow.
- Graze during autumn if there is sufficient re-growth.
- Maintain the double-cut regime for three years, which should be sufficient to control sedge invasions, providing excessive waterlogging does not recur.

Lesser pond-sedge. © Mike Dodd



Slender tufted-sedge. © Mike Dodd



⁴⁰ These possible solutions should be considered in the context of the conservation objectives for the site. Some solutions may conflict, so action taken will be determined by overriding objectives

