WILEY

Review

Source: *Journal of Ecology*, Vol. 10, No. 1 (May, 1922), p. 126

Published by: British Ecological Society

Stable URL: <http://www.jstor.org/stable/2255439>

Accessed: 21-06-2016 08:08 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://about.jstor.org/terms>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Wiley, British Ecological Society are collaborating with JSTOR to digitize, preserve and extend access to
Journal of Ecology

NOTICE OF PUBLICATION ON BRITISH VEGETATION

Stapledon, R. G. "The Condition of Permanent Meadows." *Journ. Minist. Agric.* **28**, 1921, pp. 207.

Over 14 million acres in England and Wales are under permanent grass and 30 per cent. of this is cut for hay. In 1920 the area cut for hay was over six million acres of which 73 per cent. was permanent grass. Thus the condition of meadow land is a question of considerable importance. The meadows however are much neglected and less productive than pastures. There could be improvement not only in yield but in value by reduction of weeds of which an excessive amount are often present. The worst weeds are *Rumex acetosella*, *Rhinanthus*, *Anthriscus silvestris*, *Heracleum sphondylium*, *Ulmia palustris*, *Centaurea nigra*, *Leucanthemum vulgare*, *Taraxacum* and *Plantago lanceolata*. Even in apparently excellent meadows a single weed may form 15–30 per cent. of the crop, as *Rumex* in Lancashire. In addition to these weeds, *Bromus mollis* and *Holcus lanatus*, early fruiting grasses of very low value, often constitute 50–70 per cent. The excessive weediness is due to varying factors, (1) withholding of manure, (2) excessive farmyard manure, (3) late cutting of hay, and (4) great length of continuance of treatment as meadow.

Experiments on grass plots in various places have shown the resultant increase of weeds with impoverishment of the soil, also that farmyard manure causes an increase while artificial manure, ammonium sulphate, gives a decrease in weeds. The weediness of meadows is an increasing evil as is shown by the returns of meadow hay crops; for the period 1903–12 the average yield per acre was 23·5 cwt., but during 1910–19 it was only 21·7 cwt.

Besides the application of artificial manure earlier cutting will tend to check many weeds by not allowing them to complete their life cycle. Weeds can also be often checked effectively by pasturage, but if this is carried out hay must be produced in other ways. Seed hay though it only represents 28 per cent. of the total gives an average yield of 6 cwt. more per acre. There is also a lesser percentage of weeds.