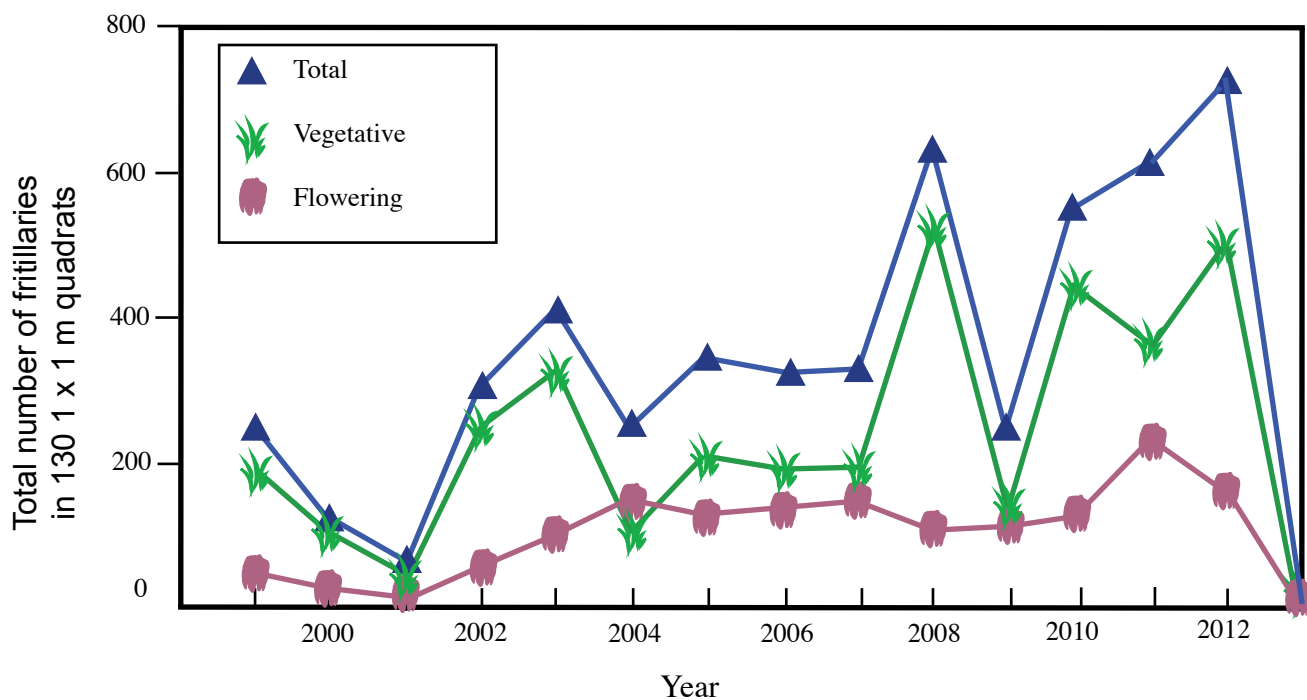


# Changes in the fritillary population at North Meadow Cricklade 1999-2013

Abundance of fritillaries at North Meadow, Cricklade 1999-2013 in 130 1 x 1 m quadrats



With 80% of the British population of snake's head fritillary found at North Meadow, Cricklade (Wiltshire) it is vital that we understand what controls the population, so we can continue to enjoy these stunning plants into the future.

Each year, a team of volunteers counts the numbers of fritillaries at different stages of development. The count is taken at the time of peak flowering in April.

Additionally, hydrological data have been collected from the same set of sampling points since 1993.

The data indicate that this species has been steadily increasing at North Meadow since 2001. The dramatic increase in vegetative plants in 2002 and 2008 may suggest that fritillaries benefit from an amount of summer flooding, whilst the other hay meadow species suffer.

The increases in flowering individuals seen in 2011 suggests that the species has benefitted from a drier period. Individual plants are more likely to flower if there have been favourable conditions the previous year.

The catastrophic decline in 2013 is almost certainly related to the extensive flooding in 2012, when North Meadow was underwater for 10 months.