

PLASTIC GRASS PITCHES & THE IMPACT ON BIODIVERSITY

Bob Campbell Oval is a sensitive environmental location adjacent to Lane Cove River Estuary and Sydney Harbour



Natural turf areas support a rich level of soil biodiversity, with soil invertebrates able to gain nutrients and water from the fertile topsoil. These organisms recycle nutrients within the food chain, breaking down organic and inorganic materials for plants and other organisms to then use.

Creation of a wildlife desert

- Burrowing insects such as solitary bees lose access to soil and soil dwellers such as worms lose access to the ground surface ⁶
- The food chain deteriorates, with herbivores requiring natural grass and carnivorous bugs and animals including birds losing access to soil invertebrates ⁶

Reduced soil moisture and organic content

- Synthetic turf blocks infiltration of rainfall, decreasing soil moisture
- The loss of grasses and their roots removes a primary source of organic material for the soil
- The result is land degradation and a dramatic decrease in soil fertility

Heat island phenomenon

Whilst natural turf can reduce surface temperatures, absorbing heat during the day and releasing it at night, synthetic turf cannot and can lead to increases in the ecosystem microclimate.¹

This heat island phenomenon can decrease species abundance, richness and diversity, particularly amongst invertebrate populations.¹⁴