

BACKGROUND

- Earthworms have an important role in helping to aerate soils, reducing compaction, improving water penetration and infiltration rates, processing organic matter and reducing thatch.
- Earthworms come to the surface under moist soil conditions (e.g. in late autumn and winter) and retreat downward in dry weather.
- However, some species of earthworms leave casts on the turf surface and this has many negative effects:
 - * Aesthetics
 - * Uneven surface levels
 - * Weed invasion more likely as casts may bring dormant weed seed to the surface or by wind blown seeds landing on casts and germinating.
 - * Mole activity increase in proportion to worm populations.

APPROACH

1. Reduce thatch in programmed approach to minimise food source for earthworms.
2. Minimal use of organic amendments.
3. Lower soil surface pH to discourage earthworm activity by using acidifying fertilizers.
4. Encourage drier surfaces through aeration and verticutting etc.
5. Minimise amount of clippings returned to soil (organic material) by use of slow release fertilizers and/or Plant Growth Regulators.
6. Using a wetting agent with strong penetrant activity will ensure that moisture moves from the surface and down the soil profile and make surface casting less likely.



i-TURF SOLUTIONS

Product type	Why	Scotts solution
Acidifying fertilizer	Reducing soil surface pH will discourage earthworms from surfacing and producing casts.	Greenmaster
Acidifying fertilizer with slow release	Reducing soil surface pH will discourage earthworms from surfacing and producing casts, while the slow release nutrition will minimise excessive top growth and hence reduce potential food source for worms.	Sierraform GT
Penetrant wetting agent	Encourage water movement away from surface down through the soil profile making surface less appealing to earthworms.	H2Pro Maximise
Carbohydrate and seaweed biostimulant	Encourage biological recycling of soil nutrients by stimulation of soil bacteria.	Greenmaster Blade
Plant Growth Regulator	Minimise clipping return by up to 50% and reduce food source for earthworms.	Primo MAXX