

GREENKEEPER

International

In times of imposed water restrictions and drought orders, the need for greenkeepers to practice water conservation is paramount. The following eminently sensible advice is taken from a current information leaflet published jointly by the British Turf and Landscape Irrigation Association (BTLIA) and the Sports Turf Research Institute (STRI), Bingley, W Yorks BD16 1AU.

The information will also serve as an additional guide for your green committee, the better that they may understand the problems water shortages present in undertaking intelligent golf course maintenance practices. Cut out this page and display in a prominent position.

WATER CRISIS

Good maintenance practices will encourage the development of a vigorous healthy sward with a deep rooting system, which will be able to withstand the effects of drought better than a weak sward.

It is essential that irrigation systems are properly maintained. Servicing and repairs should be carried out during the winter months so that the system is working efficiently on starting up in spring. Check for leaks. Ensure that efficient use is made of all available water sources on the course.

Whilst limited water is still available

- 1 Make sure your watering system is working efficiently. Check sprinkler arcs, nozzles, etc Water only essential areas.
- 2 Do not water during the day.
- 3 Reduce the frequency of watering and water more thoroughly each time, to get moisture well into the soil.
- 4 Do not allow puddles to form or surface run-off to occur.
- 5 Improve infiltration of water by spiking (not slitting) or with wetting agents, particularly where thatch is serious and on high spots. (High spots may require a hand-held hose, perhaps with attachment for wetting agent.)
- 6 Wetting agents are usually most effective

if first applied in late spring with additional applications through the growing season, according to the severity of the problem and water availability. Water in after application, to avoid scorch.

- 7 Raise the height of cut. Where appropriate, return clippings (cuffings) to help to act as a mulch.
- 8 Mow fine turf with pedestrian machines.
- 9 Reduce the frequency of mowing as growth slows down.
- 10 Spread light applications of compost top dressing on golf greens and similar fine turf areas, and work in gently with a mat.
- 11 Keep pin positions to the margins of golf greens.
- 12 Reduce wear on turf by varying position of pathways and closing off sensitive areas.

No water available

When all watering is banned continue with points 7-12 as conditions dictate.

- 13 Do not apply pesticide or fertiliser.
- 14 Stop verticutting or grooming on golf greens and similar fine turf areas.
- 15 Do not carry out any aeration work.
- 16 On small areas of newly established seed or turf, use perforated plastic sheet or netting to conserve moisture (but beware heat stress under covers).

17 Be prepared to close golf greens or similar areas to avoid long-term damage which will require costly reinstatement.

After the drought

- 18 Reinstatement any severely damaged areas as soon as conditions and water availability will allow.
- 19 Wetting agents can be used to help with re-wetting of drought-damaged or water-repellent turf.
- 20 After the immediate problems have been dealt with it may be necessary to revise the management strategy, to minimise future problems. The following points should be considered:
 - Alleviate compaction to encourage deeper rooting and water infiltration.
 - Eliminate excessive thatch by a combination of scarifying, hollow tining and top dressing with sandy compost
 - If possible, manage turf to favour drought-tolerant species and to develop deep root systems.
 - Update the irrigation system to improve efficiency.
 - Investigate alternative water sources: it may be possible to intercept and store surface water to boost reserves
 - Increase the water storage capacity.