

# MISTER AND MISSES

The survival of seedlings and sprigs with adequate moisture can be assured with this simple technique.

BY LARRY GILHULY

The principles of grass seed/sprig establishment are well known. Adequate temperature, fertilizer, light, and air are all necessary to start and continue the growth process of every type of cool- and warm-season grass. However, the one variable that often determines the success or failure of initial establishment is adequate water. Over the years, the standard



The Turtle Bay Golf misting system is adapted to larger sites with multiple lines sent from the control system. The lines have been pressure reduced from the regular irrigation system.



The low throw angle and precipitation of this type of misting system is ideal for wind-swept sites when growing-in sprigs or seeds.



practice of using the existing irrigation system with multiple cycles has been used; however, the following problems can sometimes occur:

- Wind causes dry areas, which requires reseeding/sprigging.
- Excess water volume at the end of the large nozzle causes seed/sprigs to move slightly, requiring reseeding/sprigging of small areas.
- Too long between cycles, which causes drying of seed/sprigs.
- Excess water during establishment, which causes seedling disease.
- Disruption to nearby players.

The establishment of greens, tees, and other smaller areas (along with large acreage areas) has certainly been completed with success by using existing irrigation systems. Although irrigation is a necessity for the grow-in of a new golf course, the preceding points do not necessarily make them the best choice on an existing golf course where smaller areas must be established. With this challenge in mind, a simple idea observed in Hawaii at multiple sites during the past decade may be of interest if you want to eliminate the potential for seed/sprig failure. A supplemental form of irrigation that provides a "24/7" approach to irrigation coverage is highlighted in this turf tip as a sure-fire way to keep your sprigs or seed moist enough at all times to assure rapid germination and seeding/sprig establishment.

Mike Honma, superintendent at the Turtle Bay Resort on the Island of Oahu, has been the golf course superintendent at Turtle Bay since the time of original construction, and he has experienced both hybrid bermudagrass and seashore paspalum establishment on the same golf course. This extremely windy site posed the problem associated with a regular irrigation system where the water from high-throwing heads is simply displaced by the wind, resulting in inconsistent coverage during establishment. He also wanted to find a way to avoid disturbing golfers when tee and cart path renovation work was

being done. His answer was a simple misting system that he has used on seashore paspalum sprigs on greens, green surrounds, tees, and other small areas with very positive results. The system covers approximately 9,000 sq. ft. at a cost of approximately \$0.15/sq. ft., and its components can be found in the accompanying sidebar table. According to Mr. Honma, this method of sprig establishment has been more effective and faster than relying on his regular irrigation system. For more information, contact Mike Honma at Turtle Bay Resort at 808-293-8574.

Milton Nakagawa, superintendent at the Mauna Kea/Hapuna Resort, has had similar success with hybrid bermudagrass sprigs on tees and other small areas at both golf courses on the Big Island of Hawaii. He also wanted to find a way to apply water in nearly constant wind while not bothering golfers. The components of Mauna Kea's misting system cost an estimated \$0.15/sq. ft., and it covers approximately 1,200 sq. ft. Mr. Nakagawa also

reports a preference for this type of small area misting system, as it keeps the sprigs moist at all times without overwatering and is less affected by the persistent wind. Both superintendents report no disruption for golfers, other than a few cooled-off ankles! For more information concerning this system, contact Mr. Nakagawa at 808-880-3131.

The use of this unique form of misting system for growing-in sprigs or seed offers a simple way to consistently provide needed moisture during the critical portion of early establishment. It also is the perfect answer if you are concerned about bothering golfers who may come in close proximity to the renovated location. Whether you are a "Mr." or "Mrs." growing-in new turf areas, this is one "mister" that will greatly reduce the "misses" that can occur with a regular irrigation system when dealing with small area establishment of sprigs or seed.

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#### TURTLE BAY MISTING SYSTEM

- | DC Propagation Controller with 1" valve
- | 120 SuperNet Brown Nozzle X Purple LR Swivel, 30" Tube & Stake
- | 0.5" x 1,000' blank RAM tubing, .57 inside diameter x .66 outside diameter (17 mm)
- | 0.5" x 250' blank RAM tubing, .57 ID x .66 OD (17 mm)
- | 1" mipt, Air/Vacuum Relief Valve
- | 0.75" x 80 mesh disc filter
- | 0.75" x 43 psi. pressure regulator
- Multiple bushings, elbows, tees, nipples between tubing and water connection point
- Manifold assembly — outside source

#### MAUNA KEA MISTING SYSTEM

- | DIG Controller 1" Single DC
- | 125' Poly tubing 0.75" Roberts
- 28 EFCO Mini Compact Brown 42 gph / 29' diameter
- 28 EFCO 36" tube with Cantal assembly
- 28 EFCO stake 13" press fit
- | Senninger PRV 30 psi 1" 2-20 gpm
- Minor fittings