Stop 5. Sustainable Water Conservation through Evapotranspiration Replenishment Regimes, with Wetting Agents and Cultural Practices

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A field study from 2010-12 is evaluating watering replenishment levels of daily 30, 60, and 90% 'ET', daily double mowing, and a wetting agent on a native soil 'Crenshaw' creeping bentgrass putting green. Rodney Tocco, a Ph.D. student will present the field plots and discuss effects on soil water infiltration, ball roll, visual quality, and an interesting view into the microbial community below the turfgrass surface. Watering levels are effectively being reduced 40-70% from state recommendations, and double mowing plots are showing slight advantages in the dollar spot endeavor. Green speeds and overall quality have not been reduced with 'ET' replenishment watering regimes or wetting agent applications.

Watering Regimes & Cultural Practices in Crenshaw Putting Greens - HTRC 2012

Block 'B'

	60% ET	60% ET	60% ET	60% ET	90% ET	90% ET	90% ET	90% ET	30% ET	30% ET	30% ET	30% ET
N ^	2X	1X	2X	1X	1X	1X	2X	2X	1X	2X	1X	2X
			W.A.	W.A.	W.A.		W.A.		W.A.			W.A.
Trt	**7**	**5**	**8**	**6**	**10**	**9**	**12**	**11**	**2**	**3**	**1**	**4**
Plot	**101**	**102**	**103**	**104**	**202**	**204**	**203**	**201**	**302**	**303**	**301**	**304**
	90% ET	90% ET	90% ET	90% ET	30% ET	30% ET	30% ET	30% ET	60% ET	60% ET	60% ET	60% ET
	2X	1X	2X	1X	1X	2X	1X	2X	1X	2X	2X	1X
		W.A.	W.A.				W.A.	W.A.	W.A.	W.A.		
Trt	**11**	**10**	**12**	**9**	**1**	**3**	**2**	**4**	**6**	**8**	**7**	**5**
Plot	**108**	**105**	**107**	**106**	**205**	**206**	**207**	**208**	**306**	**308**	**307**	**305**
	30% ET	30% ET	30% ET	30% ET	60% ET	60% ET	60% ET	60% ET	90% ET	90% ET	90% ET	90% ET
	1X	1X	2X	2X	1X	1X	2X	2X	1X	1X	2X	2X
		W.A.		W.A.		W.A.		W.A.		W.A.		W.A.
Trt	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Plot	**111**	**109**	**110**	**112**	**212**	**209**	**211**	**210**	**309**	**310**	**311**	**312**

1X = Single Mowing Daily
2X = Double Mowing Daily
W.A. = Wetting Agent (6 fl oz/1000ft^2)

Notes:
Plots are 7' wide by 32' long and evenly spaced within each irrigation area in the block.