It's in Carolina and nothing could be finer... DAVID WHITE reports on the spectacular venue for this year's Ryder Cup. Exclusive Greenkeeper International photographs by MIKE KLEMME

The OCEAN Course

The pessimists can depart, the folks who thought it shouldn't even be considered dismissed, for the new Ocean course at Kiawah Island, South Carolina is already earning huge praise, even before being officially opened for play.

In a game so ancient that it often questions its own origin, acclaim is something earned over time. Great players earn their acclaim over a career, and courses more often attain greatness over decades than overnight. Yet in a sport which so honours tradition this newcomer is earning praise from all who see it.

Designed by noted architect Pete Dye, The Ocean Course



is carved from nearly three miles of oceanfront sand dunes along the extreme eastern end of Kiawah Island. All 18 holes, as well as the clubhouse and practice area, offer breathtaking views of the Atlantic Ocean, with ten holes playing directly along the beach.

Destiny appears to be holding a place amongst the best in the world for The Ocean Course, but in another area, far removed from the sports world and Ryder Cup ballyhoo, the infant course is already







Main picture, previous page: The back nine - providing a memorable finish with the last five holes situated directly along the beach. Small picture, an aerial view of eastern tip of **Kiawah Island**, with the new **Ocean Course** stretching along nearly three miles of beach. This page: The first hole - a parfour of 395 yards from the back tee with a large waste bunker right of the fairway.

being acclaimed as a critical success.

In an age when environmental impact studies command such attention, The Ocean is earning acclaim from scientists and environmentalists for its sensitivity to nature.

Course designer Dye, who already has 10 courses ranked among the top 199 in either Golf Digest or Golf Magazine (U.S.) went to great lengths to ensure that The Ocean Course would blend with its oceanfront setting.

But it is behind-the-scenes efforts – such as the installa-

tion of a unique internal drainage system that recycles irrigation water while protecting adjacent wetlands from run-off, or the creation of acres of saltwater and freshwater wetlands, or the building of dunes and the extensive planting of native grasses – that have environmentalists singing Dye's praises.

The Ocean Course is the first golf course to be built with a complete internal drainage system. This is achieved through a series of drains and underground pipes, all water falling on tees, greens, fairways etc flowing back into the irrigation system.

More than 14 miles of pipe have been installed under the course to recapture irrigation water and allow recycling.

'Even if the marsh is only three feet away', Dye explained, 'the water drains back into the golf course, into these catch basins and down into a major series of pumps underneath the course'.

Through these pumps, Dye is able to keep the water table at two feet above sea level, the same level as the fresh groundwater. This leaves a minimum of three feet of dry sand for filtering water that doesn't reach the fairway drains before this water reaches the groundwater table.

Although they figured on retrieving 50,000 to 100,000 gallons at most, they are picking up 300,000 gallons of fresh water each day, about 50% of the water needed to irrigate the whole course.

'When you figure the cost of water', Dye said, 'in the long run the installation cost – between \$150,000 and \$200,000 (\pounds 78,000 – \pounds 104,000) amortizes itself... over a five year period you save that much in water costs'.

'From the Coastal Council's point of view, this also

'It is behindthe-scenes efforts that have environmentalists singing Dye's praises' solves the only thing they could object to, the fear that some of the pesticides or chemicals supplied are getting off into the marshes or surrounding areas. By monitoring this, and recycling this water all the time, we know exactly what we're doing as far as what we are putting on the golf course'.

All of this was worked out as Dye was building The Ocean Course.

'I went to the Coastal Council and explained the theory of what we were doing and constantly kept them updated', he said. 'When they saw the first hole

going in that way they could see something was going to happen here that would set a precedent for them with other courses in sensitive areas'.

Dye created a vast system of freshwater wetlands within the interior of the course. These lagoons have been planted with native grasses and are part of the irrigation system. The grasses help to filter the water before it is pumped back onto the golf course. And the sand that was excavated from these lagoons was used to elevate the fairways so that every hole offers a view of the ocean. Altogether Dye has created more than 22 acres of

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The 475-yard, par-four fourth hole could prove to be one of the most difficult on the front side, as both the drive and approach shot must carry the saltmarsh.

freshwater wetlands within the course.

Dye has ordered extensive plantings of sea oats in the dune areas and will continue to plant through the spring of 1991. The grasses, including sea oats, panic grass, American beach grass, papsalum and sweetgrass (used locally for basket weaving), help preserve the dunes against forces of erosion. These same grasses are used in some bunker faces and along the perimeter of the tees.

Tees and fairways are planted in 419 hybrid Bermuda. Tifdwarf, a much finer strain of Bermuda, has been used on the greens, collars and approaches. 'We have tried desperately not to create a maintenance monster on this course', he said. 'The fairways, tees and greens, we think, can be maintained with four different types of mowers'.

Dye said the sea grasses will be controlled with irrigation and spray, eliminating another area that would require maintenance on a conventional course.

These efforts have combined to make The Ocean Course at Kiawah a most unconventional course, one that will serve as a standard for all courses built in environmentally sensitive areas.