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Lake City Scholarship Winners:

(Left to Right)

Iris Davis, Mike Stemm, Jeff Elwood, Eric Krahn, Frank Yaun, Al Smith, Dr. Muriel Kay Heimer (Pres., LCCC), Paul Meredith, Jennifer Moore, Dan Adams, Roy Clark, Chris Claus, Steve Fairtrace, Wade Hartsfield

Continued from p. 60

the most sought-after in the industry.

There are several reasons for this, according to John Piersol, chairman of the department, but a primary reason is the college's emphasis on the practical aspects of the industry. "We teach our students the importance of the day-to-day tasks of industry professionals," said Piersol, "from maintaining and repairing equipment to handling the paperwork that will eventually become part of the graduates' jobs."

Another important reason for the department's success, according to Piersol, is its close ties to industry members. "Without our strong relationships with the companies like Toro, Jacobsen and Nor-Am Chemicals, we wouldn't be able to have the good, up-to-date supplies that really help prepare our students," he said. "We wouldn't be able to afford them."

The department's success manifests itself in other ways as well. One of the most important gauges of the department's success is the quality of students who enter it. Many of them enter after having received undergraduate or even graduate degrees, and most of the students have some experience in the field before entering Lake City.

For example, Mike Stemm, a golf course operations student, holds a bachelor of science degree in agronomy from Colorado State University. Just prior to entering LCCC, he was the manager of a Pillsbury dried-bean plant in Nebraska. "I didn't feel fulfilled," said Stemm, 36, "and I decided that I needed a change." So, he decided to go back to college for his master's degree in agronomy. When he visited the University of Florida, however, the head of the agronomy department advised Stemm to get a degree in golf course operations instead of his master's degree. "At first, I was disappointed at this supposed step back," said Stemm, "but now I realize that I owe that professor a lot. Without him, I wouldn't have attended Lake City, and I wouldn't have learned the professional attitude and the good, practical bank of information necessary to succeed in the industry. I also wouldn't have gotten the great job I've got lined up for after graduation."

An Awards Ceremony

Stemm's is only one of 150 stories in the department of golf course and landscape operations, however. There are many students who come to Lake City from far-flung destinations such as Finland, England, Canada and Bermuda because of the department's reputation. There's the woman with the master's degree in business administration who decided to change careers and go back to school. There's the dentist who quit his practice of seven years to work on the grounds crew of a golf course so he could get the experience he needed before enrolling in LCCC's department of golf course and landscape operations. But at an awards banquet held at Lake City Country Club in April, it was easy to see that each of the students appreciated the education they received in their fields from LCCC. It was more like a football awards ceremony than anything. Cheers and standing ovations followed each scholarship awarded and each instructor introduced.

Chairman John Piersol opened the ceremony by listing the amount of scholarship money used within the department. It totaled over $30,000 from many sources, and another $5,000 went begging in the area of service technicians alone because of the small number of students entering this field. Dr. Muriel Kay Heimer, president of LCCC, also attended the ceremony. She said that the department of golf course and landscape operations was a leader on campus because of its strong ties to industry and because of its wide scope, with students coming from every state in the union.

Scholarship winners were: Chris Claus *(landscape operations)* and Mike Stemm *(golf course operations),* $500 each from The Toro Company, Minneapolis; Steve Fairtrace *(landscape)* and Paul Meredith *(golf course)* $500 each from QAE Services Inc., Tampa, FLa.; Roy Clark *(landscape)* and Al Smith *(golf course)*, $250 each from Nor-Am Chemicals, Wilmington, Del.; Wade Hartsfield and Frank Yaun *(both in landscape)* $200 each from Post Landscape, a division of Post Properties, Atlanta; Iris Davis *(landscape)* $300 from Glen Saint Mary Nursery for outstanding achievement in 1988, Glen Saint Mary, Fla.; Dan Adams and Jennifer Moore *(both in landscape)* from LCCC Landscaping Club, Lake City, Fla.; Debbie Bergeron *(landscape)*, $500 from the Northeast Chapter of the Florida Nurserymen and Growers Association; and Eric Krahn *(turf equipment service technology)*, $800 from Stovall and Co., Inc., Atlanta.

Jeff Elwood received the prestigious Robert Lassett Memorial Award for the student who most exemplifies the qualities of Robert Lassett, an LCCC student who was killed while still attending the college. Elwood donated the $500 scholarship to the Golf Course and Landscape Operations Endowment Fund, which is currently being built up to support programs that the department's regular budget cannot allow for, including scholarships, equipment, materials and others.

Finally, the Ed Combest Scholarship for Excellence in Service Technology was announced. Named for the current driving force behind the service technology program at LCCC, it is to go to the service technology student who most exemplifies Combest's ideals of professionalism and performance. ■

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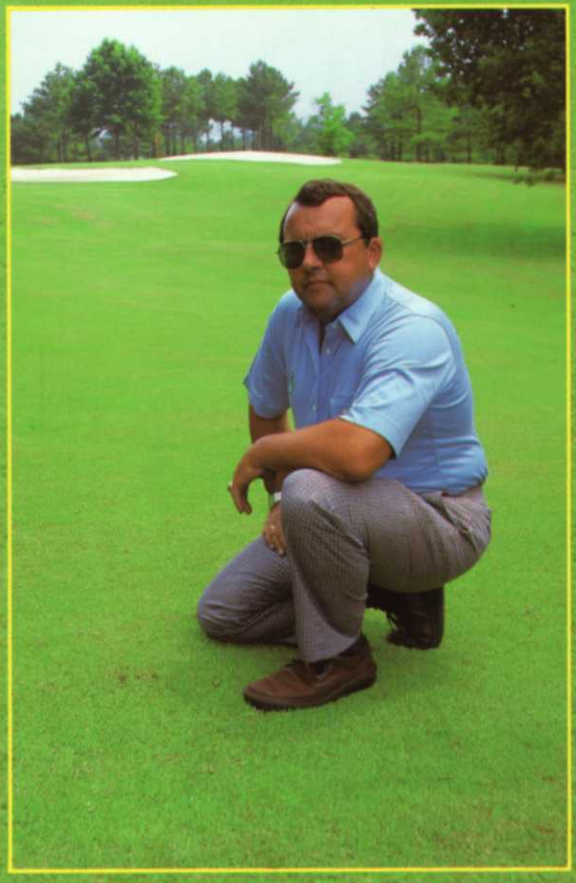

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Lightning
A Flash in the Sky

by CHARLOTTE JONES

IF we lived during the time of the Ancient Romans, we would believe that thunder and lightning were the weapons of the god Jupiter. Ancient Romans thought that such powerful and deadly weapons could belong only to the greatest of gods. Thunder and lightning was one of the great mysteries of nature.

Now the mystery is solved. We know, through scientific study, that lightning is really a flow of electricity, formed high above the earth. One thing that has not changed over the years is it can make us quake in our boots and raise our heart rate with the anxiety of seeing a bolt of lightning and waiting to hear the crack of thunder. Before you can say, "YIPES!", your pet dog has run under the bed or found some place to hide. All creatures great and small have an instinctive respect for lightning.

Do you know how lightning produces thunder? As lightning travels, it heats the air in its path. The sudden heating causes the air to expand violently. The cool air farther away is pressed into a smaller space. This process starts a great air wave that results in THUNDER.

Before you hear the thunder, flashes of lightning take place between a positively charged area and a negatively charged area. These may be different parts of the same cloud, different clouds, or a cloud and the earth.

A spark between a cloud and the earth may measure as much as eight miles in length. It may travel at a rate of 100,000,000 feet a second. Lightning that reaches between oppositely charged clouds may have a length of 20 miles. Photographs of lightning obtained by radar indicate that some cloud-to-cloud lightning strikes may measure 100 miles in length.

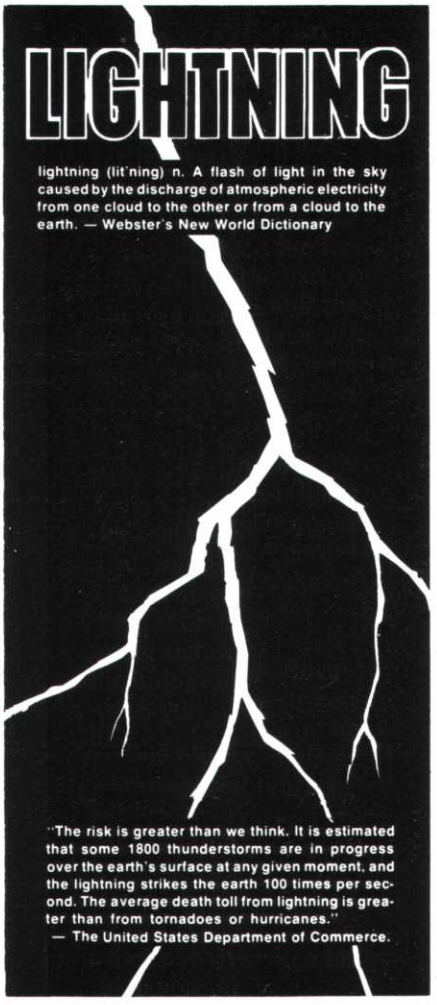
Lightning between clouds does not cause any damage on earth, because the electrical energy is dispersed in the air. But lightning between a cloud and the earth often causes loss of life and property. A bolt of lightning can kill a person or start a forest fire. Scientists have found that one stroke of lightning usually measures more than 15,000,000 volts.

There Are Different Kinds of Lightning

All lightning strikes are basically about the same. But they appear to have different forms, depending on the position of the observer.

FORKED, ZIGZAG, OR CHAIN lightning is a chain of brilliant light that appears to zigzag. It actually follows a winding path, like a river. The single streak of lightning often breaks into several branches or forks.

SHEET lightning has no particular form. It is usually a bright flash that spreads all over the horizon and lights up the sky. Sheet lightning is really light from a flash of chain lightning that takes place beyond the horizon.



HEAT lightning, often seen on summer evenings, is the same as sheet lightning, but the flashes are fainter. Thunder usually does not accompany them. The lightning occurs too far away for thunder to be heard.

BALL lightning seems to consists of balls of fire, as small as walnuts or as large as balloons, that last about three to five seconds. They fall swiftly from the clouds until they strike the ground and explode. Sometimes they roll slowly along the ground and do not explode until they hit an obstacle. Ball lightning is the least understood of all forms of lightning. Many meteorologists even doubt that it exists. They think it may be an optical illusion. However, so many reliable witnesses have seen it, that scientists have begun to study it. They have produced ball lightning in the laboratory. This kind of lightning does not appear to be dangerous.

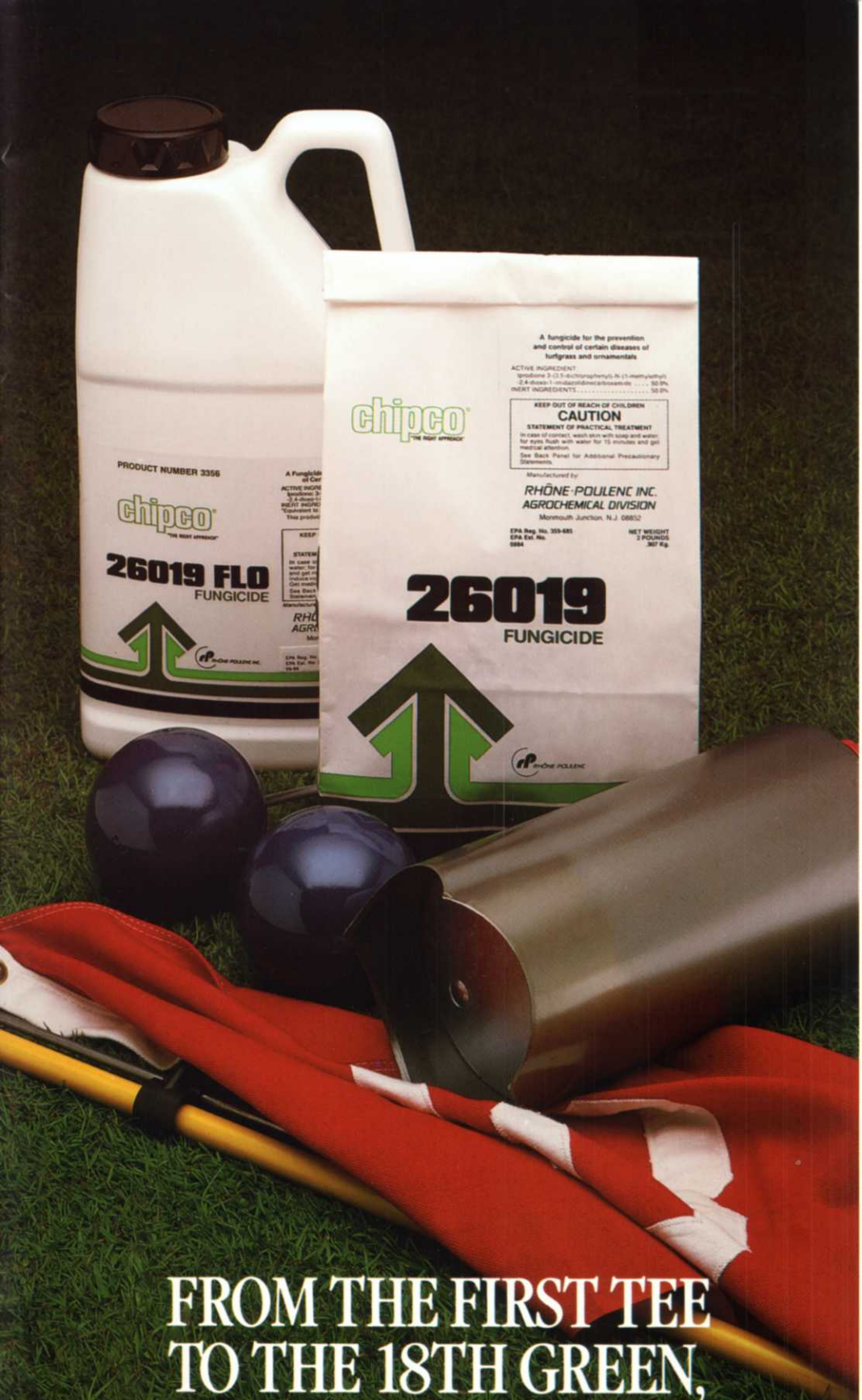
According to the United States Department of Commerce: 1800 thunderstorms are in progress over the earth's surface at any given moment, and the lightning strikes the earth 100 times per second. The average death toll from lightning is greater than from tornadoes or hurricanes.

Normal household current usually contains around 200 amps whereas lightning can contain up to 200,000 amps. Don't be mislead by amperage. A person can be killed with as little as 3 amps of electricity.

Lightning also poses another threat. Heat is a problem with lightning strikes. A person struck by lightning can be burned with temperatures as high as 15,000 degrees farenheit. Lightning presents three initial problems:

1. High Voltage
2. High Amperage
3. High Temperatures

These three things can inflict serious damage to a person. *Continued on p. 66*



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CHIPCO® 26019

FUNGICIDE

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Continued from p. 64

Florida with its tendency for surprise afternoon storms make the golfer and golf course employees a likely target. No one likes to think about getting struck by lightning. Perchance you find yourself in the midst of a surprise storm, keep these precautions in mind:

Keep away from trees. Lightning generally strikes tall objects such as trees, posts, poles, etc. By being close to these objects you may become a target and get shocked.

Stay away from water. Water is an excellent conductor of electricity and you may get shocked even if you are a distance away from the lightning strike or standing on wet grass. Do not seek shelter near a lake, river, etc.

Stay away from metal huts. Lightning, as with all electricity, is conducted through wet surfaces and metal.

Seek shelter. Get inside a building or inside a closed car. Do not seek shelter in a small partially enclosed building. Many outdoor "huts" still get wet floors.

Open area. If you are in an open area such as a fairway, crouch down or lay on the ground.

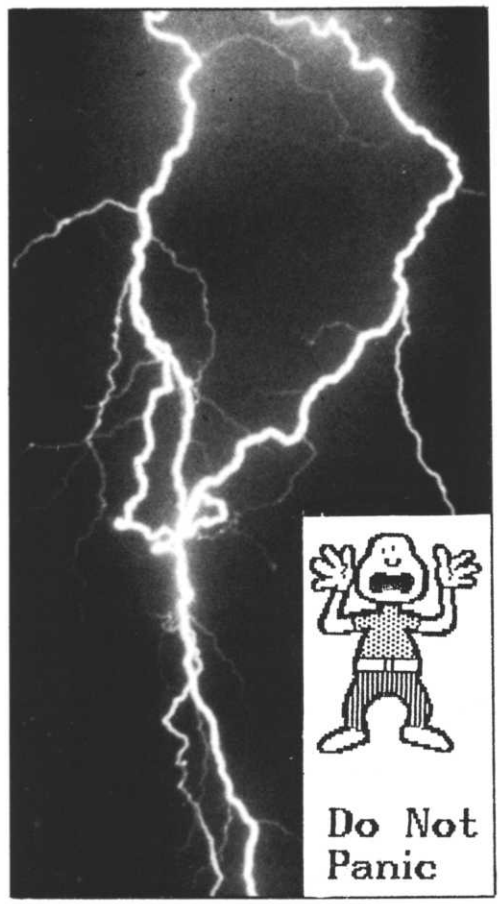
If skin tingles, duck. Static electricity will build just before a lightning strike. If your skin starts tingling, this is an indication of an impending strike. Get onto the ground quickly.

Because Flordia's weather can change from beautiful sunshine to a torrential downpour in a matter of a few hours, use common sense and get back to the club house or safe shelter before lightning strikes.

How to Treat A Victim Struck By Lightning

Above all do not panic. Nothing gets done in a panic.

1. Before leaving the safety of a building, call Rescue. If possible, have someone watch for Rescue to guide them to your exact location. Time is of the essence. Resuscitation needs to be started as soon as possible after the lightning strike.



2. Check the victim: If cardiac arrest, perform CPR. Keep working on the victim until Rescue arrives.
   - There may be burns on the skin or burns inside the body. As electrical current passes through the body, it burns the tissues. From the entrance into the body until it leaves the body through the exit wound, the current damages the tissues in its path.
   - Victims are usually thrown into the air, landing several feet from their original position. This landing may have caused broken bones and more importantly, it may cause a broken neck. A broken neck, if not handled properly, can cause permanent paralysis.
   - Other people near the victim can be injured, too. Golfers play in groups from two to four. Anyone in the group standing too close or standing on damp ground can receive a serious shock. You may be treating more than one victim.
   - Unless there is a severe threat to your life and the lives of the people around, you, do not move the victim. *Do Not* be tempted to put the victim into a golf cart and make a run for the clubhouse regardless of what the people around urge you to do Remind people around you not to panic!

Lightning is an unpredictable act of nature that makes a mighty and sometimes deadly statement of force. True respect of this force is to *know* the rules for safety and to *follow them.* ■

LIGHTNING — THUNDERSTORM SAFETY RULES FOR GOLF COURSES

WHEN A THUNDERSTORM IS APPROACHING:

DON'T play the next shot: Get off the course IMMEDIATELY.
DON'T seek shelter under an isolated, unprotected area.
DON'T hold on to metal shafted clubs.
DON'T use an umbrella with a metal shaft.
DON'T be naive and play the odds and think you will never be affected by lightning on a golf course.

DO get off the course AT ONCE.
DO seek refuge in a large building or a rain shelter or other small building equipped with approved lightning protection or under a tree equipped with a certified lightning protection system.
DO get off high terrain - you are safer in a ditch, gully or depressed area or lying flat on the ground.

REMEMBER:

YOU DON'T HAVE TO BE HIT BY A DIRECT STROKE OF LIGHTNING TO BE SHOCKED, INJURED OR KILLED. THERE IS A POSITIVE CHARGE OF ELECTRICITY IN THE GROUND EQUAL TO THE NEGATIVE CHARGE IN THE THUNDERHEAD AND LIGHTNING CAN ENTER YOUR BODY FROM THE GROUND UP CAUSING SHOCK, INJURY OR DEATH ESPECIALLY WHEN WEARING METAL SPIKES OR HOLDING A METAL SHAFTED CLUB.

— Courtesy of

The Florida Golf Course Superintendents Association

Florida Has Most Lethal Lightning, Study Finds

The Associated Press
WASHINGTON

FLORIDA had more fatalities due to lightning strikes over the past 24 years than any other state, a study reveals.

The National Weather Service has compiled statistics showing that 2,430 Americans were killed by lightning between 1959 and 1982, with fatalities occurring in 48 states.

Only Hawaii and Alaska were free of lightning deaths during that 24-year stretch.

Here is a state-by-state roundup of lightning deaths from 1959 to 1982:

Alabama, 61; Alaska, 0; Arizona, 35; Arkansas, 90; California, 12; Colorado, 64; Connecticut, 12; Delaware, 8; District of Columbia, 3; Florida, 235; Georgia, 59; Hawaii, 0; Idaho, 18;

Illinois, 63; Indiana, 62; Iowa, 54; Kansas, 40; Kentucky, 59; Louisiana, 90; Maine, 16; Maryland, 99; Massachusetts, 19; Michigan, 68; Minnesota, 37; Mississippi, 66; Missouri, 67;

Montana, 18; Nebraska, 35; Nevada, 3; New Hampshire, 5; New Jersey, 44; New Mexico, 57; New York, 90; North Carolina, 125; North Dakota, 10; Ohio, 89, Oklahoma, 71; Oregon, 4; Pennsylvania, 91;

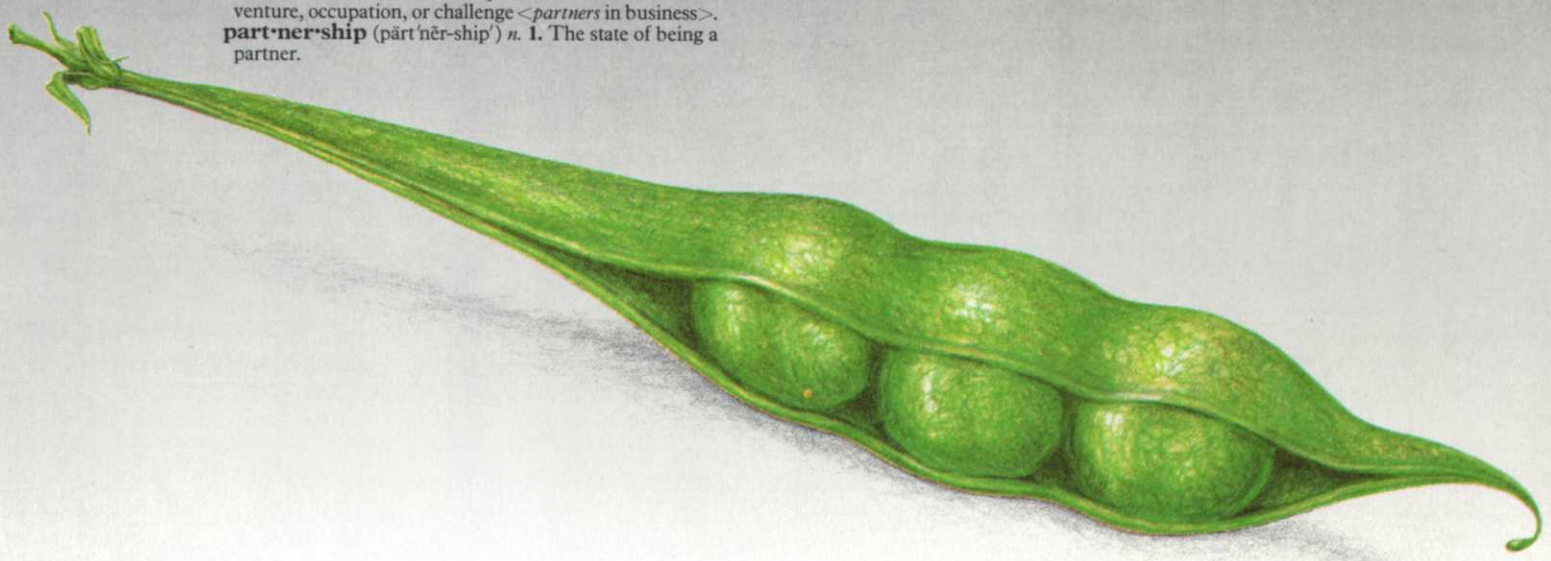
Puerto Rico, 24; Rhode Island, 3; South Carolina, 58; South Dakota, 14; Tennessee, 89; Texas, 127; Utah, 15; Vermont, 13; West Virginia, 17; Wisconsin, 36; and Wyoming, 21. ■

P A R T N E R S

part·ner (pärt'nĕr) *n.* **1.** a person associated with another or others in a common activity or interest, esp.: **a.** a member of a business partnership.

☆ ***syns:*** PARTNER, ALLY, ASSOCIATE, COLLEAGUE, CONFEDERATE; one who cooperates with another in a venture, occupation, or challenge <*partners* in business>.

part·ner·ship (pärt'nĕr-ship') *n.* **1.** The state of being a partner.



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Comparison of Overseeded Grasses for Putting Greens

by A. E. DUDECK and L. B. McCARTY

OBJECTIVE

COOL-SEASON turfgrasses are commonly used for overseeding purposes in the South to provide a green, ground cover and a playing surface during the winter period when bermudagrass goes dormant. The purpose of this study was to evaluate the suitability of various bentgrass, *Agrostis* sp., species and/or cultivars for overseeding purposes.

MATERIALS and METHODS

Nineteen entries of cool-season grasses listed in Table 1 were overseeded on a Tifdwarf bermudagrass putting green at the IFAS Turfgrass Field Laboratory, Gainesville, FL on 12 Nov. 1987. The Tifdwarf green was sprigged on 9 Sept. 1987 and was 95% covered at the time of overseeding. The test area was topdressed 14 days before seeding with a fumigated soil identical to the Arredondo fine sand (loamy, silicious, hyperthmeic Grossarenic Paleudult) on 29 Oct. 1987 at the rate of 7.4 ft^3/1000 square feet (approximately one-eighth inch of soil). After topdressing, the side was dragged and watered daily.

Seed was diluted with a handful of soil and applied by hand to each plot. Plots were 4 by 6 feet in size and replicated three times in a randomized block design. After seeding, the area was again topdressed with 11ft^3/1000 square feet of soil to cover the seed. Nemacur was also applied at 3 pounds of active ingredient per acre for the control of mole crickets. Preventative fungicides and insecticides were applied as needed throughout the study to minimize disease and insect problems, respectively. Light, frequent irrigation was applied three times per day during the establishment period. Two weeks after seeding, supplemental irrigation was reduced to once a day to meet daily evapotranspiration loss. Fertilizer was applied by-weekly commencing on 23 Nov. 1987 as 17-1-10 at 0.5 pounds of N per 1000 square feet.

Field data were gathered on rate of establishment based on visual estimates of percent overseeded cover three to four days during the first two months and

Continued on p. 72

Table 1. Seeding rates of cultivars, mixtures and blends of cool-season turfgrasses overseeded on a newly planted Tifdwarf bermudagrass green at Gainesville, FL.

Entrees	Seeding Rate (lbs/1000 sq. ft.)
Laser Rough bluegrass	10
Saber Rough bluegrass	10
Laser (60%) and Streaker Redtop (40%)	7
Laser (60%) and Penncross Creeping bent (40%)	7
Marvelgreen Supreme Ryegrass Blend (50% Palmer, 25% Prelude, 25% Yorktown II)	30
Marvelgreen and Laser (85:15)	25
Penncross and Streaker (50:50)	5
Streaker redtop	5
Penncross Creeping bentgrass	5
Penneagle Creeping bentgrass	5
Pennlinks Creeping bentgrass	5
VNS Creeping bentgrass	5
Seaside Creeping bentgrass	5
Pennway Creeping bentgrass blend	5
National Creeping bentgrass	5
Highland Colonial bentgrass	5
Exeter Colonial bentgrass	5
Kingstown Velvet bentgrass	5
Nutri Coated Penncross Creeping bentgrass	5
Tifdwarf check - not overseeded	—