

### BRIEFS



#### NATURE'S CHOICE

PHOENIX, Ariz. — Nature's Choice is the theme of the 1995 Southwest Horticultural Trade Show at Phoenix Civic Plaza here, Sept. 7-8. The Cactus and Pine Golf Course Superintendents Association and Golf Course Superintendents Association of America will present educational sessions on the overall topic Turf Stress Management. More information is available from the Arizona Nursery Association at 1430 W. Broadway, Suite A125, Tempe, Ariz. 85282; 602-966-1610.

### NORTH OF THE BORDER

VANCOUVER, British Columbia — The Canadian Golf Superintendents Association (CGSA) will holds its 47th Turfgrass Conference and Trade Show



at the Vancouver Trade and Convention Centre here, March 2-5. More information is

available from Andrea Franks at CGSA, 5580 Explorer Dr., Suite 509, Mississauga, Ontario L4W 4Y1; 905-602-8873.

### BLEIER HIGHLIGHTS N.Y. CONCLAVE

ROCHESTER, N.Y. — Rocky Bleier, former Pittsburgh Steeler, will headline the four-day annual educational conference and trade show cosponsored by the New York State Turfgrass Association (NYSTA) and Cornell University. The keynote is scheduled for Nov. 8, at 9 a.m. As an added feature, pesticide recertification credits from several states and continuing education credits for national associations are available for conference attendance. For more information contact the NYSTA at 800-873-TURF or 518-783-1229.

### CONTAINMENT SYSTEM DESIGN

CLEVELAND, Ohio - Published by Advanstar Communications, "Containment System Design: Chemical Storage, Mixing and Recycling" by Fredric R. Haskett contains information that will allow operators to design and construct an affordable, viable and safe facility to store handle, mix and recycle pesticides, fertilizers and other chemicals. It explains how to prepare for the scrutiny of government regulators and comply with new regulations; explores the legal implications of noncompliance; and discusses thecost of recycling finished product residues versus the cost of having them disposed of by an outside agency. Containment System Design costs \$74.95. Copies can be ordered by calling 1-800-598-6008.

# Wildlife studies complement one another

Audubon investigating from the point of view of sustainable resources

By MARK LESLIE C ELKIRK, N.Y. — In fortui-

tous timing for an industry seeking wisdom about golf's environmental impact, the Audubon Society of New York (ASNY) is undertaking a wildlife study that dovetails with the U.S. Golf Association's (USGA) Wildlife Links program overseen by the National Fish and Wildlife Foundation.

"This came about at a fortunate time because I was in the process of instituting the Audubon Center for Sustainable Resource Management (ACSRM)," said ASNY President Ron Dodson.

Wildlife Links and ACSRM



s and ACSRM The impact of golf courses on deer and other wildlife is the subject Continued on page 22 of more intense study.

USGA-backed Wildlife Links using a more broad-brush approach By MARK LESLIE

AR HILLS, N.J. — The first fruits of the U.S. Golf Association-sponsored Wildlife Links Program will be two publications providing golf course superintendents hands-on information "to make their facilities more environmentally in-tune," according to USGA Green Section National Director Jim Snow.

Undergoing a name change from Nature Links because of a near-conflict with another group's program, Wildlife Links was birthed to promote courses as friendly homes for wildlife and to attract support from environ

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# Experts urge aggressive defense vs. Lyme disease

RESEARCH TRIANGLE PARK, N.C. — Despite more than a decade of public awareness, the number of reported Lyme disease cases remains high, and some experts are now recommending a more aggressive approach for controlling the ticks that carry this potentially debilitating disease.

Many medical health-care experts and university extension offices now urge homeowners in high-risk areas to treat their lawns and lawn peripheries with an insecticide to reduce populations of the ticks which vector this disease. The primary vector of Lyme disease is the deer tick, also known as the black-legged tick. Although ticks are most commonly found in wooded, overgrown and weedy areas, many Lyme disease victims are bitten by ticks in their own yards, and the use of protective clothing and insect repellent alone have not been successful in checking the spread of the disease. In 1994, more than 10,000 new cases of Lyme disease were reported in the United States, according to the national Centers For Disease Control (CDC). More than 57,000 cases of Lyme disease have been reported since recording of these cases first began (1982-1993).

In high-risk areas, such as the Northeast coastal states, North Central states

courses.

and parts of the West Coast, an application of a commonly used home insecticide can help reduce deer tick nymphs and adults in home lawns and lawn peripheries by up to 95 percent.

Although symptoms are sometimes absent, Lyme disease is usually initially characterized by the presence of a bull'seye shaped rash at the site of the tick bite, followed by fever, headache, fatigue and pain in the muscles and joints. Although it is treatable with antibiotics, if left untreated, the disease may result in double vision, chronic arthritis, meningitis, hearing loss, cardiac problems, memory loss

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### No Dutch treat for elm lovers

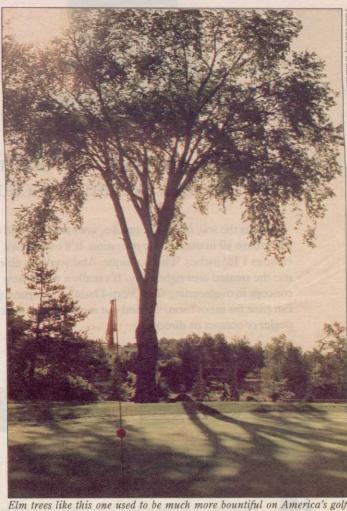
#### By DAVID M. ROSE

GROSSE POINTE FARMS, Mich. — In the early part of this century, golfers teeing off here at the Country Club of Detroit enjoyed the shade and splendor of more than 3,000 stately American elms. Today, all but 300 are gone, victims of the deadly Dutch elm disease. Sadly, the situation in Detroit is by no means unique.

Introduced to the United States in shipments of contaminated logs in the 1920s, Ceratocystis ulmi, the fungus that causes Dutch elm disease, has reduced the North American elm population by 50 to 80 percent over the last 75 years. But while there is still no sure-fire cure for Dutch elm disease, newly developed fungicides and disease-resistant elm varieties are beginning to turn the tide.

To understand the options for dealing with Dutch elm disease, it is necessary to understand the life cycle of the fungus. Fungal spores are carried to the tree by the elm bark beetle, which feeds on tender new shoots and bark. Once inside, the fungus invades the xylem, the water-carrying vessels of the tree. As the fungus proliferates, the xylem becomes blocked, resulting in wilting, yellowed leaves, and death.

For superintendents hoping to vanquish Dutch elm disease, the approaches are basically three: kill the bark beetle, kill the fungus itself, or plant elms that are less susceptible to the fungus' lethal effects. The most common means of controlling bark beetles is treatment with the pesticide Methoxychlor. The Elm Research Institute (ERI) of Harrisville, N.H., a non-profit institution dedicated to the preservation of the American elm, recommends trees be sprayed prior to leaf emergence each year. By heading off the annual influx of hungry bark beetles, according to ERI, **Continued on page 18** 





# N.Y. Audubon launches environmental, agronomic service program

#### By MARK LESLIE

CARY, N.C. - The Audubon Society of New York State (ASNY) has launched a national conservation service program to provide environmental and agronomic services to members of its Audubon Cooperative Sanctuary System (ACSS).

**Called Audubon Conservation Services** (ACS), the program will "promote environmental land management and conservation of our natural resources through on-course education and services for ACSS-member golf courses," said ASNY President Ron Dodson.

"Every aspect of the ACS program will promote sustainable resource management objectives dedicated to maximizing the quality and playability of the golf courses while minimizing environmental exposure."

Using a team approach, it will deal with course management issues through environmental planning; wetlands, water-qual-

ity and storm-water management; fertilizer and pesticide programs; and agronomic and environmental integration.

ACS will not compete with the U.S. Golf Association Green Section advisory services, Dodson said, because "we are going to be doing things they normally don't look at.'

In fact, Green Section National Director Jim Snow, giving "100 percent endorsement" for ACS, has asked Audubon personnel to do "a training session for their people this fall," Dodson said. "We will develop a check list for their regional agronomists to use when they do their turf advisory visits. They will look for things that we are going to focus on, such as maintenance complex design, washdown areas and pesticide storage."

The cornerstone of ACS is to provide technical leadership by professionals with agronomic and environmental experience in golf course development and management. It will be led by senior scientist Dr. Miles (Bud) Smart and Dr. Charles H. Peacock. Each has more than 17 years of experience in his field.

Collectively, they have provided services at more than 100 golf course and land-use projects.

"We've essentially signed a unique partnership agreement with Charles and Bud," Dodson said. "Their Turf Science Group is a member service for the Audubon Cooperative Sanctuary Program. So when Charles and Bud and others do their work for a fee, they will be representing Audubon Society of New York.'

"Additionally, doctorate-level scientists will provide expertise in areas of aquatic ecology, toxicology, risk assessment, environmental statistics and modeling, wetlands ecology, hydrology and remote sensing," Dodson said. "GCSAA-certified superintendents will provide expertise on a regional basis."

The specific services ACS will offer are: · Development of written plans for **Integrated Pest Management and Best** Management Practices (BMP) to develop an ecologically based approach to course management as well as incorporate BMPs to protect ecologically sensitive areas.

· Risk assessment to select the best materials for effective fertilization and control of pests in order to integrate sustainable resource management objectives.

· Constraints analysis for selection of pesticides and nutrients.

· Monitoring programs to develop systematic measures to assess golf course and environmental interactions.

The result, Dodson said, is a low-risk approach to golf course management and pesticide use.

# Audubon research: golf and wildlife

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research will augment, rather than duplicate, one another, Dodson said, adding that the USGA Green Section supports the Audubon effort.

"Wildlife Links exclusively looks at wildlife on golf courses," he said. "We will look at that but many other things as well. We are revolving everything around sustainable management: plants, waste, technology, energy efficiency ... We want [scientists] and others to look at our principles of sustainable resource management and see if they are adequate, if we have the answers to put these principles on paper and try to hold land developers to those standards.

"Wildlife Links is focusing on broadbrush wildlife and golf research projects. I'm interested in more long-term wildlife biology efforts. I want to know, for example, if there are songbirds nesting between fairways? Are they producing young birds? At what rate? How does that

rate compare to wildlife refuges and national parks that are managed with wildlife in mind?

"Wildlife Links will discover what kinds of birds are found, if amphibians are found, if there are more on wetlands than inland. I want to get into the biology of the critters."

Dr. Charles Peacock expects to take a sabbatical year off North Carolina State University in 1996 and volunteer as plant science research director, while Dr. Larry Woolbright of Siena College will assume duties as wildlife research director.

"Schuyler Meadows Golf Course here will serve as the home-base study course, and Siena as wildlife golf research center.

"We have seven research associates involved already, and we're not even off the ground," Dodson said.

The plan is that Peacock will perform a thorough literature review on what information is available, and write a book called Best Management Practices for Golf

Wildlife Links is focusing on broad-brush wildlife and golf research projects. I'm interested in more long-term wildlife biology efforts.' - Ron Dodson, ASNY president

Courses, which the USGA will sponsor.

The literature review will determine "what holes there may be in research as it relates to private landowners and golf courses," Dodson added. "My job is to get funding to make the research happen."

The ASNY mission is research, education and information exchange, Dodson said, adding that its personnel will conduct workshops and seminars, and share computer bases with government agencies and others to foster good decisions in finding and developing appropriate land.

ACSRM will be a mechanism to fulfill that mission, he said.

Meanwhile, ASNY officials are proceeding over the next 10 to 12 months to incor-

porate Audubon International Signature as a not-for-profit association that will become the parent organization of ASNY and its various programs. ASNY has hired zoologist Nancy Richardson to run the Signature Program from a technical point of view. Her office is at 2045 Alves Ferry Road, Henderson, Ky. 42420; 502-546-9419.

"We will put together a budget and have the opportunity for individuals, corporations, companies, associations to become sponsors of the Signature Program and of the Audubon International Center for Sustainable Resource Management," Dodson said. "Some of that money will be put toward research. We may have grants available and will be looking for research associates."

