effectiveness. Since tree 2 and pollens used on it are from different areas, incompatibility is not a probable explanation for the failure of these pollination combinations. Tree 2 flowers could be highly sensitive to any heat buildup associated with bagging. Flowers pollinated just after stigma separation (early) set and matured as well as those pollinated again after full stigma elongation. Either stigmas were receptive early, or pollen on them remained viable until they became receptive.

Type I pollen carried in the dry ice container tested 30 percent germination or better each day and after 5 days in the field. Type 2 pollen tested 30 percent or better the first 2 days but fell to about 10 percent the third day, then to 0 after 5 days. Since a dry ice container is easy to construct is advisable to have one for field pollination so that pollen can be used over a long period or perhaps saved to put into liquid nitrogen storage for another season's use. For large-scale work with several pollens, it is advisable to use several small dry ice containers to avoid exposing all pollens to air temperature when only one is used.

The stored pollen used on tree I was just as effective as the fresh ones in effecting fertilization, which agrees with germination tests.

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News & Reviews

Black Cherry Killed by Siltation

Black Cherry planted in the flood plain of the French Broad River in Buncombe County, North Carolina, survived and grew well for 2 years despite periodic flooding during both the growing and dormant seasons. These floods allowed substantial standing water but only minor siltation. However, last fall. a severe flood left siltation deposits averaging 4 inches - 5 inches deep and many of the trees are now dead. Only the largest trees, being at least 6 ft. tall, have survived. Apparently. the young black cherry trees can tolerate flooding but are not adapted to withstand deep soil deposits around the tree base. Significantly, in the same planting. sycamore, black walnut, butternut, willow oak, and European black alder showed little or no mortality from the siltation deposits. (from "Hardy Hardwood's Observations", Raleigh. N.C.)

Car Top Platform Devised For Examining Tree Crowns

A platform that fits on top of a car, station wagon or panel truck has been devised to provide easy and safe access to tree crowns up to 20 feet in height cost was about $250. Inventors are Hoover L. Lambert of Southeastern Area's Asheville, North Carolina office; and James Daniels and Larry Crompton of National Forests of North Carolina. Details can be obtained from Lambert ..... address is Forest Pest Management, USDA Forest Service. P. 0. Box 5895, Asheville, North Carolina 28803.

A Fresh Look At A Little Known Species

One of the minor southern species, sand pine, has the potential to bring many idle acres of sandhills in the South into full production of marketable forest products. A book devoted entirely to sand pine has been issued by the Southeastern Forest Experiment Station. Based upon papers presented at a recent symposium of researchers and practicing foresters, the book covers subjects ranging from nursery practices to the management and harvesting of plantations and the conversion of the tree into various products. Results of research on site preparation, planting methods. and projected yields will interest owners of sandhill land. Sand pine will produce more wood in a shorter time than other pines planted on sandhill soils. Yields of 1 to 1.25 cords per acre per year for plantation-grown wood have been reported.

Copies of the Sand Pine Symposium Proceedings, General Technical Report SE-2, can be obtained from the Southeastern Forest Experiment Station. P. 0. Box 2570, Asheville. N.C. 28802. Additional information and answers to your questions can be obtained by writing to Southeastern Forest Experiment Station. P. 0. Box 900. Marianna, Fla. 32416. (Special from Bob Riesterfeldt. SE Area)

Sulphur Hurting Trees

A United Press story in the Washington Post reports a Forest Service disease detection survey showed apparent sulphur dioxide injury to trees in Tonto, Coronado, Apache. and Gila National Forests. The problem reportedly was caused by copper smelters.

(Continued on p. 17)

No evidence of accumulations of undesirable chemicals or toxicity resulting from the use of these diphenamid herbicides was found.

Diphenamid does have several drawbacks:

1. It provides a somewhat limited spectrum of weed control (the mustards. goatweed, dandelions, and all perennials are not affected.)
2. Since we apply it after the trees are up, weeds that germinated with the trees must be manually removed. Diphenamid kills germinating weed seeds in the surface laver of the soil.
3. It requires periodic application because the chemical is rapidly broken down.

Despite these drawbacks. diphenamid herbicide applied as described has reduced hand weeding at this Nursery by 70 to 80 percent resulting in much lower labor costs.

This report constitutes a summary of several years' work. More complete details can be obtained by writing the Coeur d'Alene Nursery, Route 1, Box 245, Coeur d'Alene, Idaho 83814.

NOTE: Articles in this periodical may contain information about pesticides. The following notations are offered for your protection:

Caution: Pesticides can he injurious to humans, domestic animals, desirable plants, and fish or other wildlife-if they are not handled or applied properly. Use all pesticides selectively and carefully as described. Follow recommended practices for the disposal of surplus pesticides and pesticide containers.

Warning: Recommendations for use of pesticides are reviewed regularly. The registrations on all suggested uses of pesticides in this publication were in effect at press time. Check with your County Agricultural Agent, State Agricultural Experiment Station, or local forester to determine if these recommendations are still current.

News & Reviews

(Continued from p.11)

Soviet Tree Planting Pleases Md. Neighbors

Whatever course Soviet-American detente may take at the summit, it is thriving in the town of Centreville on Maryland's Eastern Shore. The reason, officials feel, may be trees.

Staff members at the Soviet Embassy in Washington are planting trees by the hundreds during weekends at Pioneer Point, the embassy's retreat on the Chester River.

The work is being done with the help of local forestry officials and the warm approval of the Soviets' Queen Annes Country neighbors.

"Tree planting is a custom in our country," said Vladimir Mikoyan, an embassy staffer who helped set out 2,000 loblolly pines and 50 walnut seedlings over the past two weekends.

Every parent teaches the child to plant at least one tree for the good of all people. It is a habit to plant trees wherever possible."

The project began last month when John R. Riley. regional forester for the state, and Jay Dunbar, county forester, received a routine request from a not-so-routine source.

According to Riley, he and Dunbar were contacted by four Soviet Embassy representatives, who invited them to Pioneer Point to discuss plans for tree planting based on a map of the estate drawn by Anatoly F. Dobrynin, the Russian ambassador in Washington.

Once at the retreat, Riley recalled, the Russians couldn't do enough for their American guests.

The foresters had shiskebab and shared lunchtime toasts of Russian vodka in the dining room of the estates's mansion house. One of the toasts. Riley said, was to Smokey Bear.

When the Soviets purchased 40 acres and the two main residences on the former John Jacob Rascoh estate in 1972. there was some ill feeling among local residents. Today, there is little sign of strain between the two groups.

Mikoyan, who spends weekends at Pioneer Point with his wife and their 8-month-old daughter, noted that he has passed the same local man on the streets of Centreville two weekends in a row. On the second occasion, Mikoyan continued, he was greeted as an old friend.

"It was very nice," the embassy staffer said.

Riley said the Russians seem to want friendly relations with their Eastern Shore neighbors. "and what better way is there than planting trees?"

(from the Washington Star-News. April 1974)

"Oldest" Status In Question

New York Times quotes a Chinese professor of botany in Taiwan as claiming to have discovered a tree older than the Methuselah bristlecone pine in the Inyo NF. He say's it is at least 6,000 years old. Located near Taipei, it was not identified by species.

Seedlings From Methuselah

Los Angeles Times reports the FS Institute of Forest Genetics at Placerville is now growing 48 seedlings from Methuselah, the bristlecone pine on FS land in the White Mountains near Bishop. The 4,500-year-old tree is considered the world's oldest living organism. This is one of the many projects by the lab described in the Times article.

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TABLE 1.—Initial and first-year tree percents and stockings in four studies

	Study number and treatment	Average field germination	Seedling-to-seed ratios in May	First summer survival	Seedling-to-seed ratios at age 1 yr.	Seedlings per acre at age 1 yr.
		Percent	*Percent*	*Percent*	*Percent*	*Number*
1	Feb.—spots-covered	46.5[1]a	22.9a	59.9a	13.5a	660
	Dec.—broadcast	12.2b	9.0bc	72.0a	5.6b	1,120
	Dec.—spots-covered	37.0a	16.7ab	34.7a	5.7b	310
	Nov.—broadcast-leaf cover	10.6b	5.8cd	67.5a	3.9b	790
2	Feb.—broadcast	—[2]	13.8b	64.6a	8.5b	1,700
	Feb.—spots-covered	—	37.3a	67.8a	25.4a	1,560
	Dec.—broadcast	—	13.3b	75.6a	9.9b	1,980
	Dec.—spots-covered	—	10.4b	61.2a	6.3b	390
3	Feb.—broadcast	32.9a	27.1a	26.9a	6.5a	1,300
	Feb.—spots-covered	45.5a	25.4a	32.7a	7.9a	710
	Feb.—spots-not covered	41.3a	22.5a	27.0a	6.4a	570
	Feb.—furrows	46.1a	23.0a	28.2a	6.3a	330
4	Feb.—broadcast	14.4a	10.0a	63.0a	6.2a	1,250
	Feb.—spots-not covered	16.7a	12.9a	46.1a	6.1a	480
	Feb.—grooves	14.8a	13.6a	56.1a	7.6a	400
	Feb.—scarified	19.3a	16.2a	49.6a	8.5a	1,700

[1]For individual studies, means followed by the same letter do not differ significantly at the 5-percent level.
[2]Germination data not obtained.

News & Reviews *(from p. 17)*

D.C. Logs Profile of Its Trees

The District of Columbia government has quietly undertaken the mammoth task of assigning individual numbers to 100,000 city trees and logging their lift histories inside a computer.

Nearly 2 years in the making. the project still is only halfway completed, with 48,000 trees inspected. numbered and recorded at D.C. computer headquarters.

Once in full operation, however, the complicated computer system will show at a moment's notice the quality of life among all the maples, elms and oak trees that line D.C. streets.

Total cost of the project is not yet available but officials said they would include at least $30,000 in salaries for designers of the computer program, $2.800 a year to lease two computer terminals and an underterminded amount for computer time and paper.

Actual surveying of the trees would be done anyway as part of the city's $1.5 million tree maintenance effort, officials said.

In the past. the city's tree and landscaping division-a branch of the Department of Highways and Traffic-has kept its records in file cabinets like most D.C. departments.

"With computers, we can speed up our record system considerably" the chief of the tree division said. He produced a computer printout indicating that Tree No. 17293-050100.15-000-which is a 10-year-old maple in the 500 block of Quackenbush Street NW-needed a trimming.

Praising Operation MISTRE (Management Information System for Street Trees) as "the only one of its kind in the country." he said he has received numerous inquiries from other U.S. cities asking about the project.

"it seems everyone wants a tree system of their own." he said.

A paper on Operation MISTRE was to be presented to tree experts from around the world at the International Shade Tree Conference in Atlanta. Ca. in August.

(from a report in The Washington Post. April 11. 1974)

Well- Traveled Seedlings Presented for N. 0. Park

Trees as well-traveled as famed jazzman Louis Armstrong will grace a large park to be named for

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him-seedlings that have been to the moon and back were presented to the cit\ of New Orleans for the park in a recent ceremony.

The seedlings. numbering about 100. were planted in a "Trees of America Grove" in the park.

Dr. John C. Barber. director of the .Southern Forest Experiment Station. made the presentation to Mayor Moon Landrieu.

The trees include redwoods. Douglas firs. sweetgums. sycamores and loblolly pines.

Dr. Barber said the Apollo XIV mission in 1971 carried the seeds front which the trees grew. "We were interested to see if they would be affected by weightlessness. but they germinated normally." he said.

Since the Apollo flight, the seedlings have been in the care of forest researchers at the Southern Station's Gulfport. Miss.. laboratory.

Dr. Barber said the Forest Service made a commitment to help supply trees for the park at the National Tree Planting Conference in 1972. along with the American Forestry Association and the American Nurserymen's Association.

At that time. a live-oak tree was planted in front of Perserverance Hall at St. Claude Ave. and Dumaine St.. as a token of the grove of trees to come. The live oak seems to be doing well.

Restoration of the hall itself is expected to start within a few months. Tentative plans are that its first floor will have a performing area and exhibition space and its second level will house the local jazz museum.

The park trees range in height from about three to 10 feet. They are all native to Louisiana. except for the Douglas fir and redwood. which are native to the West Coast.

He believes they will all thrive in the park location. "though the redwoods probably won't reach 300 feet, like they sometimes do in California."

(from the ***Times Picayune-New Orleans. La.*** 3/20/74)

Central States Forest Tree Improvement Conference

The ninth Central States Forest Tree Improvement Conference will he held October 9-11 in Ames, Iowa. It is co-sponsored by the Department of Forestry, Iowa State University and (:SFTI(:. For details, contact Dr. Harold S. McNabb. Department of Botany and Plant Pathology. Iowa State University. Ames. Iowa 50010.

Fifty ***Years*** *Of* ***Forest Tree Seedling Production And Distribution***

The Clarke-McNary Act saw its golden anniversary on June 7. 1974. This Congressional Act, considered a landmark in Federal-State cooperation. authorized cooperation for forest fire control and production and distribution of forest tree seedlings. The act provided for the Secretary of Agriculture to cooperate with the, States in the procurement. production. and distribution of forest tree seedlings and plants thereby resulting in the distribution of 14.5 billion trees,

New Publications

USDA Forest Service

1974. Local sources of black walnut recommended for planting in Maryland. USDA Forest Service Res. Note NE-185. Northeastern For. Exp. Stn. After 5 years, local black walnut seedlings were taller than those of 12 out-of-state sources in a Maryland planting. Seedlings from south-of-local sources outgrew trees from northern sources. Genetic influences on height were expressed early--with little change in ranking of sources after the third year.

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