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OKLAHOMA water news

MONTHLY NEWSLETTER OF THE OKLAHOMA WATER RESOURCES BOARD

New OSU Research Station Seeks Cash Crop for Southeast

A problem as old as the family farm is how to select a crop that is suitable to the soil, tolerant of the caprices of Oklahoma weather, and popular in the marketplace at a price that allows a respectable profit. The problem is further knotted by the necessity of having not a single crop, but a succession of such crops to keep the farm families and laborers busy through most of the year.

These are precisely the tasks before OSU's Horticulture and Agricultural Economics researchers and USDA staff, according to Dr. Ron Johnson, associate director of Agricultural Research at OSU. OSU personnel along with USDA researchers, seek suitable crops and sources of irrigation water to turn southeastern Oklahoma into the green grocer for Oklahoma City, Tulsa and Dallas and provide produce to farmers markets, area supermarkets and food processors within trucking distance.

According to Johnson, the 273-acre complex in Atoka county will site research plots and buildings to house up to 18 staff members. As crews erect the structures, horticulturists prepare the soil for plantings next February or March.

Why southeastern Oklahoma? An economy in need of stimulation, combined with the sandy, loamy soil type well suited to the irrigation techniques necessary for high quality fruits and vegetables were prime factors in choosing the site, said Johnson. An abundance of available labor and ready access to truck routes leading to major markets also figured in the selection.

Crops that will be tested include early spring and late fall green vegetables such as cauliflower, green beans and broccoli; and traditional hot weather tomatoes, okra and sweet corn. Johnson said small fruits such as strawberries, raspberries and blueberries are also under scrutiny, and although the berries require large investments before a first harvest, the long term can be extremely profitable. Peaches, successful throughout Oklahoma, are also considered as a profitable crop for the southeastern counties.

"Ideally, income-producing crops would be under some aspect of cultivation the year around to give farm workers the consistent income required to keep them in place for times of peak labor," Johnson pointed out. Planners see full-time employment as attracting workers to the area as well as stemming the out-migration.

Still ahead for the developers of the project is locating reliable sources of irrigation water. The southern band of counties could be watered by wells in the Antlers Sandstone, but floodwater retention structures such as those developed by the Soil Conservation Service may be explored as water sources elsewhere in the region. If the area does indeed bloom and prosper under the green thumbs of OSU and USDA researchers and local farmers,

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Males' Water Board Colleagues Honor His Retirement Dec. 11

The Board room murmurred with the usual hum of nine men attending to the state's water business. Little set the day apart from some three hundred other second-Tuesday-of-the-month meetings of the Oklahoma Water Resources Board. Over the 27 years since the Board's founding, a mottled army of water problems had marched before it, but only one man of the nine had witnessed the entire procession.

That man, L.L. "Red" Males of Cheyenne, had watched Oklahoma's water history woven here. Outside this room,

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Board Chairman Gerald E. Borelli, center, holds the Resolution of Appreciation presented to L.L. "Red" Males on his retirement. Looking on are Males' fellow board members, from left, Bill Secrest, Ralph G. McPherson, Earl Walker, Gary W. Smith, Ernest R. Tucker and Robert S. Kerr, Jr.

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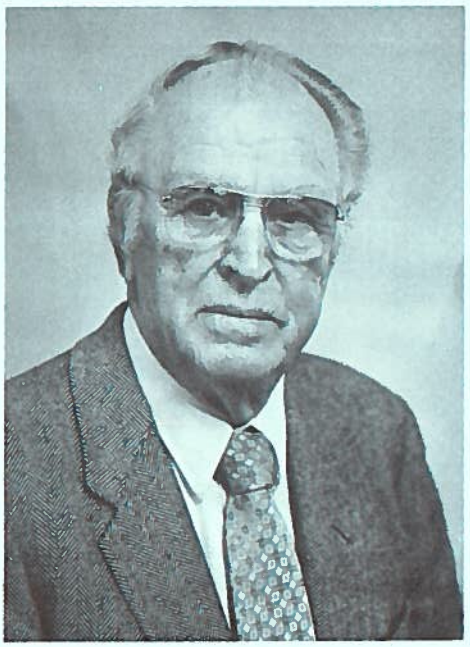
he had rolled up his sleeves and challenged western Oklahoma's dragons of drought and flood.

This day was different. An era would end here in the hush of this room as Red Males, the only member of the original Board, would close out a term distinguished with almost every award in the field of soil and water conservation. It would mark a career honored by five Oklahoma governors, a run of presidents and leaders from all over the world.

The career of the ruddy-cheeked, sandy-haired dragon-fighter began some fifty years ago as he watched the wind lash his western Oklahoma country. As he watched the droughts suck away the water, then the floods devour the topsoil, he resolved to throw his energy into saving the land. As a banker, it made good sense to him to muster the resources of the bank behind preserving the livelihood of western Oklahoma's farmers. The bank bought terracing equipment and encouraged farmers to terrace their land.

Males recalls, "the worst floods in our history came in the Dust Bowl years, followed by more dusters because almost all the rain that fell ran off."



L.L. "Red" Males

The vengeful dragon of flood marched over the land with a record-setting 11-inch rain in April of 1934, drowning 17 people near Hammon and laying a pall of brown water over homes, livestock, bridges, roads and crops. So it was, some nine times a year from the twenties through the mid-forties, when Sandstone Creek—normally a sluggish, meandering stream—dashed their crops and drowned their dreams in a roil of floodwaters.

Males was convinced that retention of rainfall and runoff in the upper watersheds was the most feasible manner in which to protect those downstream. When Congress passed the Flood Control Act of 1944, the Washita River was one of 11 selected for watershed improvement. Males and other members of the Upper Washita Soil Conservation District set out to sell the program to their neighbors and obtain easements from landowners for the construction and maintenance of the 24 dams and reservoirs which soon would speckle the watershed.

Bulldozers of the Soil Conservation Service roared over the land and the tractors of local farmers hummed as they applied the land treatment measures. By 1953, the dragon was in abeyance. The Sandstone Creek Project was finished, the first of its kind in the world. The community was so proud of it they put up a sign at the edge of town proclaiming the fact.

Males' leadership in the Sandstone Creek Project was only one effort in a life devoted to conservation; a single example of hundreds which would make his neighbors, fellow conservationists and colleagues in the banking industry proud to know him. Appreciation for the durable dragon-fighter spilled over last July 7, declared "Red Males Day" by the governor and celebrated by hundreds who came to Cheyenne to pay tribute. Cheyenne and Roger Mills County turned out, more came from the state capital, still more from all corners of Oklahoma.

His friends rejoiced with him in every way they knew—from the reception at the bank and a Main-Street parade until the last guitar note sighed over a darkened street dance. And still the day wasn't long enough to say all the thanks they wanted to.

But other days would come, and still his colleagues would seek special ways to celebrate a life of stewardship of soil and water resources. On December 11, the day was set apart from more than three hundred other such meeting days. Men long retired from the Board came back to wish him well. Gerald Borelli, chairman of the Oklahoma Water Resources Board, presented Males a Resolution of Appreciation on behalf of his Board colleagues and staff.

Among other tributes, the Resolution read, "whereas, Oklahoma's citizens and the Board's members have come to know and respect Red Males as a champion of truth, a tireless advocate of fairness and a man of perception, wit and warmth. Now, therefore, let it be resolved that his fellow members of the Oklahoma Water Resources Board, past and present, do hereby respectfully and sincerely commend L.L. "Red" Males for the invaluable service he has rendered to the People of the State of Oklahoma in protecting, conserving and developing the natural resources of this State."

Indeed, an era ended in that room on December 11 as they bade the senior member farewell.

But you never really say goodbye to a dragon-fighter. When they retire, they don't. And back home in Cheyenne, things won't change much. Males will go to Security State Bank every day, and he will walk over those hills he loves, and he will continue to keep the dragons at bay.

New OSU Research Station, continued from page 1

their success may attract the attention of federal backers for a reservoir to supply irrigation water.

Still another part of the long-range plan is that of educating the farmers in the use of new technology in the cultivation of new crops. According to Johnson, this task will be undertaken by county, area and state specialists who will work with individual farmers on their small spreads, as well as with groups of farmers in solving

common problems related to the crop shift.

"Any change of crop will cost money, and educating area bankers in the risks and benefits of backing the farmers will be the assignment of extension agricultural economists," said Johnson.

Getting the crops ready to go to market and shipping them to presold customers is a job best handled by a cooperative marketing association, he acknowledged. "The Atoka Marketing Association sold a good crop of okra to the Dallas market last summer. Preselling a crop guarantees a good return on the investment of time, materials and labor," he pointed out, "and we have something of an edge in that some facilities already are in place to process the crops and prepare them for market.

Once this horticultural project is completed and showing a profit, OSU researchers will turn their attention to further developing the area's forestry resources, forage/livestock enterprises and row crops such as soybeans and peanuts.

The agricultural Economics Department at OSU will educate local farmers in selecting, growing and marketing a succession of horticultural crops which will produce profits the year around.

Development of the small fruit and vegetable research programs will be funded primarily by the state, which contributes some $3.50 to each federal dollar in the project. However, initial start-up funds for the buildings and research program were made possible largely through the efforts of Third District Congressman Wes Watkins. Johnson emphasized that authorization for the experiment station funding is the 97-year-old Hatch Act designed to do precisely what project boosters aim for—turning the green stuff in the garden to green stuff in the cash box.

Well Measurement Begins in January

Are the state's aquifers holding their own against the demands of irrigators and Oklahoma's cities and towns? The answer will be clearer after members of the OWRB Ground Water Division complete the annual statewide well measurement survey in late March.

The study, a cooperative effort with the United States Geological Survey, will measure 1,061 wells, beginning in the Panhandle counties early in January.

Dannie Spiser, senior ground water hydrologist who oversees the program, asks landowners to allow access to OWRB and USGS personnel, most of whom will arrive in white trucks distinguished by the blue OWRB insignia. "By January, cones of depression formed by heavy pumpage have had a chance to recover and water levels are near normal," Spiser pointed out.

ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS AS OF NOVEMBER 29, 1984

PLANNING REGION LAKE/RESERVOIR	CONSERVATION STORAGE (AF)	PERCENT OF CAPACITY
SOUTHEAST		
Atoka	108,700	87.6
Broken Bow	918,100	100.0
Pine Creek	77,700	100.0
Hugo	157,600	100.0
CENTRAL		
Thunderbird	97,958	92.5
Hefner	69,100	91.6
Overholser	14,900	93.7
Draper	75,800	75.8
SOUTH CENTRAL		
Arbuckle	62,571	100.0
Texoma	2,472,000	93.7
Waurika	198,108	97.5
SOUTHWEST		
Altus	9,250	7.0
Fort Cobb	61,268	78.1
Foss	139,940	57.4[2]
Tom Steed	61,045	68.6
EAST CENTRAL		
Eufaula	2,329,700	100.0
Tenkiller	627,500	100.0
Wister	27,100	100.0
Sardis	302,500	100.0
NORTHEAST		
Eucha	79,567	100.0
Grand	1,387,160	93.0
Oologah	541,365	99.5
Hulah	30,594	100.0
Fort Gibson	364,826	99.9
Heyburn	6,600	100.0
Birch	18,602	96.9
Hudson	200,300	100.0
Spavinaw	30,600	100.0
Copan	43,400	100.0
NORTH CENTRAL		
Kaw	425,141	99.2
Keystone	545,204	88.5
NORTHWEST		
Canton	43,233	44.0
Optima	3,000	---[1]
Fort Supply	11,447	82.3
Great Salt Plains	27,330	87.0
STATE TOTALS	**11,566,209[3]**	**94.0[3]**

1. In initial filling stage
2. Temporarily lowered for maintenance
3. Conservation storage for Lake Optima not included in state total

Data courtesy of U.S. Army Corps of Engineers, Bureau of Reclamation, Oklahoma City Water Resources Department, and City of Tulsa Water Superintendent's Office.

Loans "Just Around the Corner" in Financial Assistance Program

Towns and rural water districts awaiting the first of OWRB's low-interest loans may not have to wait much longer. Qualifying applicants could be approved for funding for water and sewer development projects as soon as March, 1985, reports OWRB Assistant Division Chief of Planning, Walid Maher. The overwhelming "Yes" vote by the people on State Question 581 last August cleared legal questions hampering this portion of OWRB's Financial Assistance Plan, but more red tape prevented immediate processing of loans.

Meantime, the grant portion of the OWRB Financial Assistance Plan has in the past year provided more than $4 million to 64 communities experiencing health-threatening water and sewer-related emergencies. The loan program—the other part of the Plan—will provide low-interest loans for water resource projects. These low-interest loans play a vital role in the overall plan envisioned by the state's legislature to maintain and develop new water resources. These loans, to be offered at very desirable rates, should encourage communities to plan ahead future water and sewer system needs, and construct those projects at affordable prices.

Right now, says Maher, his office has 60 loan applicants on file for a total of nearly $45 million. Rural water districts, municipalities, public works authorities, conservancy districts and utilities authorities have requested anywhere from $13,000 for minor repairs to water treatment plants, to $3.5 million for 12-mgd-capacity municipal treatment plants. Many projects can be classified as water system improvements, which include plans to improve, expand or replace distribution lines.

There's a bit more paperwork, though, before the Board makes the first loans. The state's Office of Public Affairs has selected a financial consulting firm to handle the issuance and sale of bonds. Now, the Board must commission an update of the state's "loan demand study." Then, bonds may be issued and sold to investors. According to Maher, the bond sale will probably amount to $50 million. Proceeds from this sale will then be loaned to approved applicants at the going interest rate. If bonds can be sold early in the year, interest rates could be near 10 percent, estimates Maher, and borrowers will get very near that rate for payback.

The loans are part of a creative financing innovation in water system development funding that's attracting a lot of attention, affirms James Barnett, OWRB. "This is a new way to finance loans to small, unrated borrowers that protects the investors who buy the bonds we issue, and the state, as issuer of the bonds. The approval of State Question 581 in August amended the state constitution to let the state use a large portion of the $25 million Water Development Fund as collateral for bonds issued. The investors are assured that their investment is secure, and it allows the Board, as issuer, to enter the marketplace and obtain a high credit rating. We can then take advantage of lower market interest rates than a small town, for example, might have access to. Because the borrowers are not specified at the time of the bond issue, the concept is called a 'blind pool offering'."

Levels of indebtedness and ability to pay back will be crucial criteria for approval of loans, said Maher, who added that planners and engineers will also go over preliminary engineers' reports for project construction and cost. In all cases, says Maher, Planning's staff will work closely with applicants, and will provide all the information they'll need to improve their chances to obtain loans.

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