

# Ag experimenters compile computer aid

Most people would be happy to leave the whirring and punching sounds of the computer to the computer scientists, men who somehow enjoy the challenge of the magnificent machines.

But the academic world is no longer isolated in departmental structures. Computer science, like many other functional disciplines, has become an integral part of most departmental research and teaching programs. The problem is, of course, the computer clicks out cards in one language while the researcher thinks in another. "The trouble with computer program documentation is it has been pretty much Greek," said Stanley Wilson, research associate in the Texas Agricultural Experiment Station. Computer program documentation is the structure the communication assumes when talking about computer programs.

In an attempt to make some sense out of the computer muddle, Dr. Ray Billingsley, also with the

Experiment Station and in the Department of Agricultural Economics and Rural Sociology, initiated a new publication called "Program and Model Documentation." These publications provide the details for others to use computer programs and for those who desire to modify or revise programs, frequently a more difficult task.

"A number of linear programming models have been written over the last several years which have not been documented," said Billingsley and Wilson, who co-authored the introduction to the first publication in the series, "Program and Model Documentation Standards." "Substantial time, both professional and computer, has been expended to debug these programs and models, but after they were used for a particular project, it was not possible for another person to use them again without virtually starting over," they said.

Because of this obvious waste

of time and effort, Billingsley and Wilson have established standards of uniformity, inspired by the NUPLEX documentation standards written by R. B. Wadsworth and D. W. Rusk of the Industrial Engineering Department. Specifically, Billingsley and Wilson tell the programmer how he needs to phrase the documentation, and the beginner will be able to learn his role in relation to the programmer.

"We get down to the nitty-

gritty of it," smiled Wilson. The beginner will be able to understand how he can work with a programmer and he will understand what the relationship means in terms of authorship. The programmer will be able to use the format Billingsley and Wilson establish and explain in order to communicate in a language the researcher or student will understand.

Standards of documentation the A&M team has worked out are

not meant only for the beginner, however. The standards are designed so "the program or model can be understood both by the casual as well as the sophisticated."

Basically, Billingsley and Wilson have come up with a laymen's guide to the computer program, or if you happen to be a computer scientist, a programmer's guide on how to document for the layman.

## Young Bermuda grass causing cattle deaths

Numerous reports of deaths of cattle from emphysema of the lungs have been received at the Texas Veterinary Medical Diagnostic Laboratory from over the state during the last two weeks.

This condition is also known as pulmonary adenomatosis, interstitial pneumonia, atypical pneumonia, panthers or, in Britain, as

fog fever, says Dr. W. L. Sippel, laboratory director.

The disease is very similar to the condition in humans, caused primarily by smoking, however, the disease in cattle has nothing to do with smoking or air pollution.

Rather, he notes, it is thought to be caused by an allergic reaction to something the animals are eating. The lungs are the target organ for allergic manifestations in cattle. While the causative agent varies, most of the

current cases are associated with the high protein constituents of young Bermuda grass pastures.

If cases appear, Dr. Sippel suggests that the cattle be removed from the pasture immediately, without undue stress, fed hay and/or grain, and watched closely for a few days. Any animals that breathe unusually fast or with difficulty should be eased to a place where they can be treated. Veterinarians are using antihistamines, atropine and other drugs, if affected cattle are found soon enough.

## Identical twins prove they are

TCU's baseball twins, Dana and Pat Carden, are identical in more ways than one. The El Paso Austin products, both starters as freshmen this spring, both passed 18½ hours of class work this past semester. What's so strange about that? Nothing except that they had identical grades in identical courses for identical 3.675 g.p.r.

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## Yellow lawn cures given

Texas homeowners who have St. Augustinegrass or Bermuda-grass lawns which are turning yellow instead of growing thick and green should look for nitrogen and iron deficiencies in their soil.

The nitrogen deficiency causes a general yellowing of the lawn while the symptoms of iron deficiencies are yellow, bleached spots in the turf, according to Al Novosad, Extension pasture and turf specialist.

He said iron deficiencies devel-

op mainly in alkaline soil and the upper Gulf Coast and parts of East Texas are usually the only regions in the state that don't lack iron.

For the most rapid and effective correction of iron deficiencies, Novosad recommends spray applications of iron chelates or iron sulfate. He points out that soil applications are also helpful, but warns that they may not correct severe iron deficiencies.

Fertilizer containing nitrogen, phosphorus, and potassium should

be applied in the early spring and again in the early fall to eliminate nitrogen deficiencies, he advises. In addition to this he recommends applications of nitrogen as ammonium nitrate or ammonium sulfate at 4-6 weeks intervals during the growing season.

The additional applications help to maintain vigor, color, and uniform growth of the grass, according to Novosad.

A soil test is extremely helpful in determining exact fertilizer needs, showing the need for lime, and indicating soil salinity problems, but there are some general guidelines to follow in fertilizing St. Augustinegrass or Bermuda-grass.

Novosad advises that the applications of the complete fertilizers in early spring and fall should be made so that two pounds of nitrogen are applied per 1,000 square feet of lawn area. Examples of such applications would be 20 pounds of 10-5-5 or 17 pounds of 12-12-12 per 1,000 square feet.

The additional applications during the growing season should be made so that approximately one pound of nitrogen is applied per 1,000 square feet in each application, he added. Examples of proper application would be five pounds of ammonium sulfate (21%) or three pounds of ammonium nitrate (33%) per 1,000 square feet of lawn area.

## Red cedar paneling helps keep moths out of closets

To rid your closets entirely of pests, line closet walls with red cedar, suggests Jan Slabaugh, Extension housing and home furnishings specialist at Texas A&M.

The extra cost of red cedar is well worth the price, Miss Slabaugh adds. The aroma of cedar penetrates items stored in the closet and protects them from moths and moisture.

Moths, their larvae and red cedar do not get along, so a cedar-lined closet is entirely free of pests.

The mild odor of cedar is not pungent or excessive, but is simply a natural wood fragrance that fades after exposure to air. For

the odor to penetrate and effectively exterminate pests in the closet, the door must be kept closed.

The fragrance of red cedar in a closet also eliminates musty odors since the wood is highly resistant to moisture.

To maximize concentration of the cedar fragrance, cover not only walls with red cedar, but inside doors, ceiling and floors as well. The tongue-and-grooved boards fit together easily and the cost of improvement is small.

When lining with cedar, don't paint or varnish the surface board. Painting and varnishing seals off the cedar's aroma.

## Restrictions on swine movement extended

The Texas Animal Health Commission recently announced a quarantine order that reimposes restrictions on swine movements in Texas, first placed in effect March 29, to control hog cholera.

The new order became effective May 28, and will remain in effect until further notice, according to Woodrow W. Bailey, Extension

livestock and meats specialist.

All previous restrictions on swine movements contained in the previous order will remain the same, with the exception of one additional restriction.

The new restriction order will require holding all purchased swine for 30 days at the premise of the purchaser, and no move-

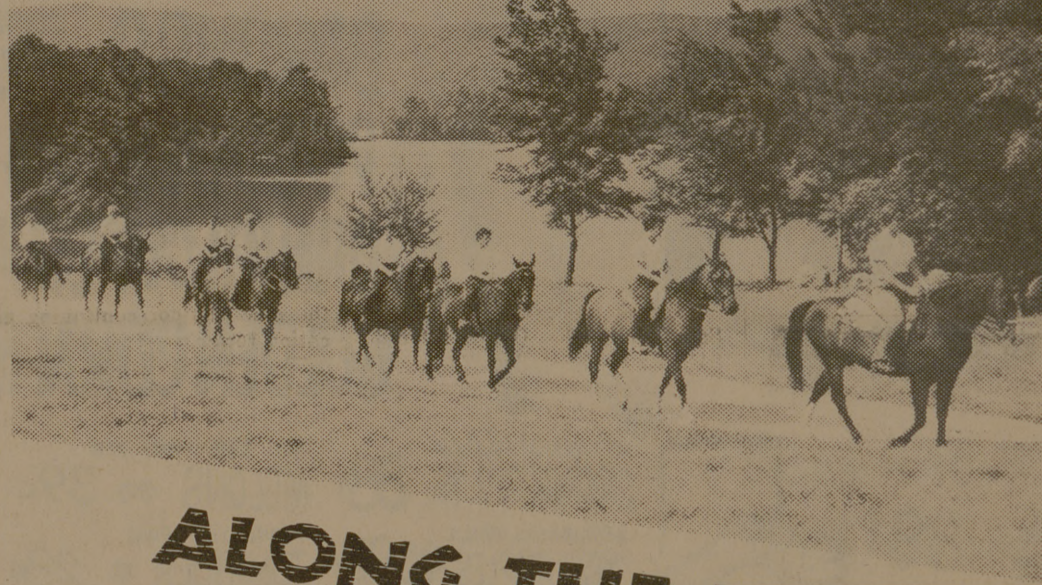
ment will be allowed except for slaughter during the quarantine, Bailey says.

If swine are apparently healthy, this premise quarantine will automatically expire after the 30th day without an inspection, according to Bailey.

He added that it is strongly felt that extending the quarantine control will bring Texas closer to the complete eradication of the hog cholera virus by the December 1972 target date. Although 22 cases of hog cholera have been confirmed since March 29, none of these cases have been connected with swine movements after that date.

Five counties — Denton, Freestone, Wise, Parker, and Palo Pinto — have been completely released from federal quarantine, according to Bailey. He added that Potter County has been placed under federal quarantine. Originally, all or portions of 33 Texas counties were under federal quarantine.

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## ALONG THE TRAIL

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Horseback riding is not compulsory. But you do have a life—and you have to live it. The way is up to you. If we get lost, we can give up, but with the help of the Church, you will find a trustworthy guide which will renew your faith and clear the way to the path of eternal fulfillment.



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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Romans	Galatians	I Thessalonians	Psalms	Psalms	Isaiah	Isaiah
15:7-13	5:22-25	1:5-10	89:15-21	149:1-9	35:1-10	60:10-17

Scriptures selected by the American Bible Society

### CALENDAR OF CHURCH SERVICES

<b>ST. THOMAS EPISCOPAL</b> 906 Jersey Street, So. Side of Campus Rector: William R. Ozley Asst.—Rev. Wesley Seeliger 8:00 A.M. & 9:15 A.M. Sunday Services	<b>ST. MARY'S CATHOLIC</b> Sunday Masses—9:00 and 11:00 A.M. Saturday Mass—7:00 P.M.	<b>FAITH CHURCH UNITED CHURCH OF CHRIST</b> 9:15 A.M.—Sunday School 10:30 A.M.—Morning Worship 7:30 P.M.—Evening Service
<b>ST. THOMAS EPISCOPAL</b> 9:45 A.M.—Sunday School 10:45 A.M.—Morning Worship 6:30 P.M.—Young People's Service 7:00 P.M.—Praying Service	<b>CHURCH OF THE NAZARENE</b> 9:45 A.M.—Sunday School 10:45 A.M.—Morning Worship 6:30 P.M.—Young People's Service 7:00 P.M.—Praying Service	<b>COLLEGE HEIGHTS ASSEMBLY OF GOD</b> 9:45 A.M.—Sunday School 11:00 A.M.—Morning Worship 6:30 P.M.—Young People's Service 7:30 P.M.—Evening Worship
<b>A&amp;M CHURCH OF CHRIST</b> 8:00 & 10:00 A.M. Worship 9:00 A.M.—Bible Study 6:15 P.M.—Young People's Class 6:00 P.M.—Worship 7:15 P.M.—Aggie Class 9:30 A.M.—Tues. - Ladies Bible Class 7:15 P.M.—Wednesday - Bible Study	<b>CHRISTIAN SCIENCE SOCIETY</b> 9:30 A.M.—Sunday School 11:00 A.M.—Sunday Service 11:00 A.M.-2 P.M.—Tues. Reading Rm. 7:00-8:00 P.M.—Wed., Reading Room 8:00 P.M.—Wed. Evening Worship	<b>A&amp;M METHODIST</b> 9:45 A.M.—Sunday School 10:55 A.M.—Morning Worship 6:30 P.M.—Campus & Career Class 6:30 & 8:00 P.M.—MYF Meetings
<b>FIRST CHRISTIAN CHURCH</b> Homestead & Ennis 9:45 A.M.—Sunday School 10:50 A.M.—Morning Worship 6:30 P.M.—Young People	<b>SECOND BAPTIST</b> 710 Eisenhower 9:45 A.M.—Sunday School 11:00 A.M.—Church Service 6:30 P.M.—Training Union 7:30 P.M.—Church Service	<b>CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS</b> 26th East and Coulter, Bryan 8:30 A.M.—Priesthood meeting 10:00 A.M.—Sunday School 5:00 P.M.—Sacrament Meeting
<b>UNITARIAN FELLOWSHIP</b> 305 Old Highway 6, South 10:00 A.M.—Sunday Service 7:00 P.M.—Adult Service 305 Old College Road South	<b>OUR SAVIOUR'S LUTHERAN</b> 8:30 & 10:45 A.M.—The Church at Worship 9:30 A.M.—Bible Classes For All Holy Communion—1st Sun. Ea. Mo.	<b>GRACE BAPTIST CHURCH</b> 2505 S. College Ave., Bryan An Independent Bible Church 9:45 A.M.—Sunday School 10:50 A.M.—Morning Worship 7:00 P.M.—Prayer and Bible Study
<b>A&amp;M PRESBYTERIAN</b> 7-9 A.M.—Sun. Breakfast - Stu. Ctr. 9:45 A.M.—Church School 11:00 A.M.—Morning Worship 6:00 P.M.—Sun. Single Stu. Fellowship 7:15 P.M.—Wed. Student Fellowship 6:45 A.M.—Fri. Communion Service Wesley Foundation	<b>CENTRAL CHRISTIAN CHURCH</b> 3205 Lakeview 9:45 A.M.—Bible School 10:45 A.M.—Morning Worship 6:00 P.M.—Youth Hour 7:00 P.M.—Evening Worship	<b>SEVENTH-DAY ADVENTIST CHURCH</b> North Coulter and Ettie, Bryan 9:30 A.M.—Sabbath School (Saturday) 11:00 A.M.—Worship Service 7:30 P.M.—Prayer Meeting (Tuesday)

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