

IOWA AGRI-CULTURE SERVES THE WORLD



\$1.00



The last 50 years in agriculture—as in human existence generally—have seen the swiftest change which mankind has ever experienced.

Fifty years ago it took about 30 minutes of man-time to raise and harvest a bushel of corn; now an Iowa farmer can produce a bushel of corn with less than three minutes work.

When the Iowa Department of Agriculture was born, it took more than a third of the U.S. work force to produce the nation's food and fiber. Today, these needs, plus tremendous amounts for export, are now produced by about five per cent of the American population.

Economically and socially, as well as geographically, Iowa has been at the center of this enormous change. Our rich soil, temperate climate and easy access have combined to make us the most important agricultural state in the nation.

These vast natural resources and modern technology have contributed to Iowa's position of leadership in agriculture. But our progress can also be credited in part to the attitude shared by Iowans that here agriculture is not in competition with non-agricultural endeavors. Instead, rural Iowa and urban Iowa complement one another. We recognize that the majority of our manufacturing service enterprises exist solely because of farming. We know our retail trade and professional activity would shrink to a fraction of its present size if it were not for the patronage of farm families who continue to be the biggest single business in Iowa and the business on which the rest of us—in large measure—depend.

Today, even with modern technology and sweeping change, some words written more than 250 years ago still remain true in agriculture: "Whoever makes two ears of corn or two blades of grass to grow where only one grew before deserves better of mankind and does more essential service to his country than the whole race of politicians put together."

Robert D. Ray

Robert D. Ray
Governor

Robert D. Ray Governor
Robert H. Lounsberry Secretary of Agriculture



Say the word "Iowa" anywhere in America, and 9 out of 10 people immediately visualize an ear of corn.

But, say "Iowa" almost anywhere else in the world... Tokyo... Brussels... London... the West Indies, and you have an entirely different picture. Here—"Iowa" is the land o' plenty which provides a great variety of farm products to feed hungry nations. In addition to corn, the variety includes: beef, soybeans, pork, turkey, chicken, oat cereals, dairy products, feed ingredients and snack foods.

And, as world diets are upgraded, the list will grow longer.

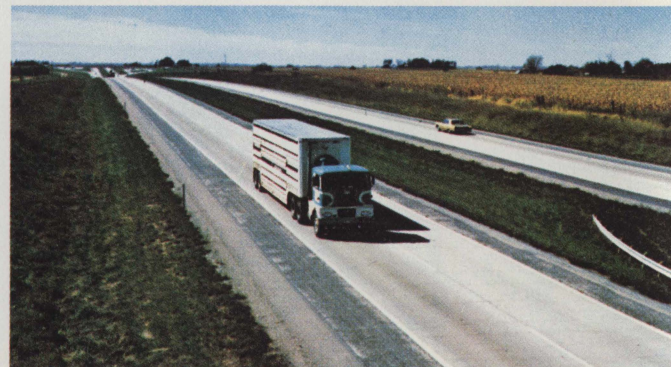
It is not so surprising, then, that the world looks at Iowa and the Iowa farmer with respect and hope. Respect for excellence of products, and hope for a continuing abundance of these products.

An outstanding example among Iowa's world customers is the Japanese. Essentially a fish-eating nation, they are, year by year, changing, upgrading their diets, adjusting to higher levels of meat, milk, eggs and fruit consumption. This means that Iowa farmers will be increasing productivity to meet these demands. Which leads to a subject of even greater concern to the United States and its people... our

international balance of payments situation.

An outstanding example of what perhaps should be called "the imbalance of payments situation" is the fact that the U.S., which is Japan's largest market for industrial goods, is running a \$4.5 billion annual deficit in its trade with Japan. Commodities exported from Iowa are contributing greatly in helping offset this imbalance.

Now, while other nonfarm products have become increasingly non-competitive in international markets, the farmer of Iowa is helping to improve



foreign demand for U.S. products, with something no other country can provide: the highest grade of farm products to answer the growing demand of upgraded foreign appetites... in Japan and everywhere else.

Can Iowa take all the credit? No. But it can take a lion's share, when you consider the fact that each Iowa farmer feeds approximately 51 people.

It's the right combination of resources and people that makes Iowa a horn of plenty. Iowa farms produce 7% of all the food produced in the entire United States.

Let's take a look at the unassailable evidence on Iowa's four major products:

Corn... still No. 1... is grown on about 11 million acres, averaging a record high yield of 114 bushels per acre in 1972. It represents 22% of the total U.S. corn crop.

Soybeans... (No. 2) are grown on 6 million acres, averaging 36 bushels per acre in 1972, also another record yield for the state. Iowa accounts for about 17% of the nation's total soybean crop.



Hogs... The 23.6 million pigs farrowed by Iowa farmers last year accounted for nearly one-fourth of the nation's pork production.

Cattle... The 3.9 million head marketed from Iowa feeders in 1972 accounted for about 15% of the United States' total supply of fed cattle. Corn-finished cattle that yield the tender, juicy steaks that have made beef the favorite meat in America.



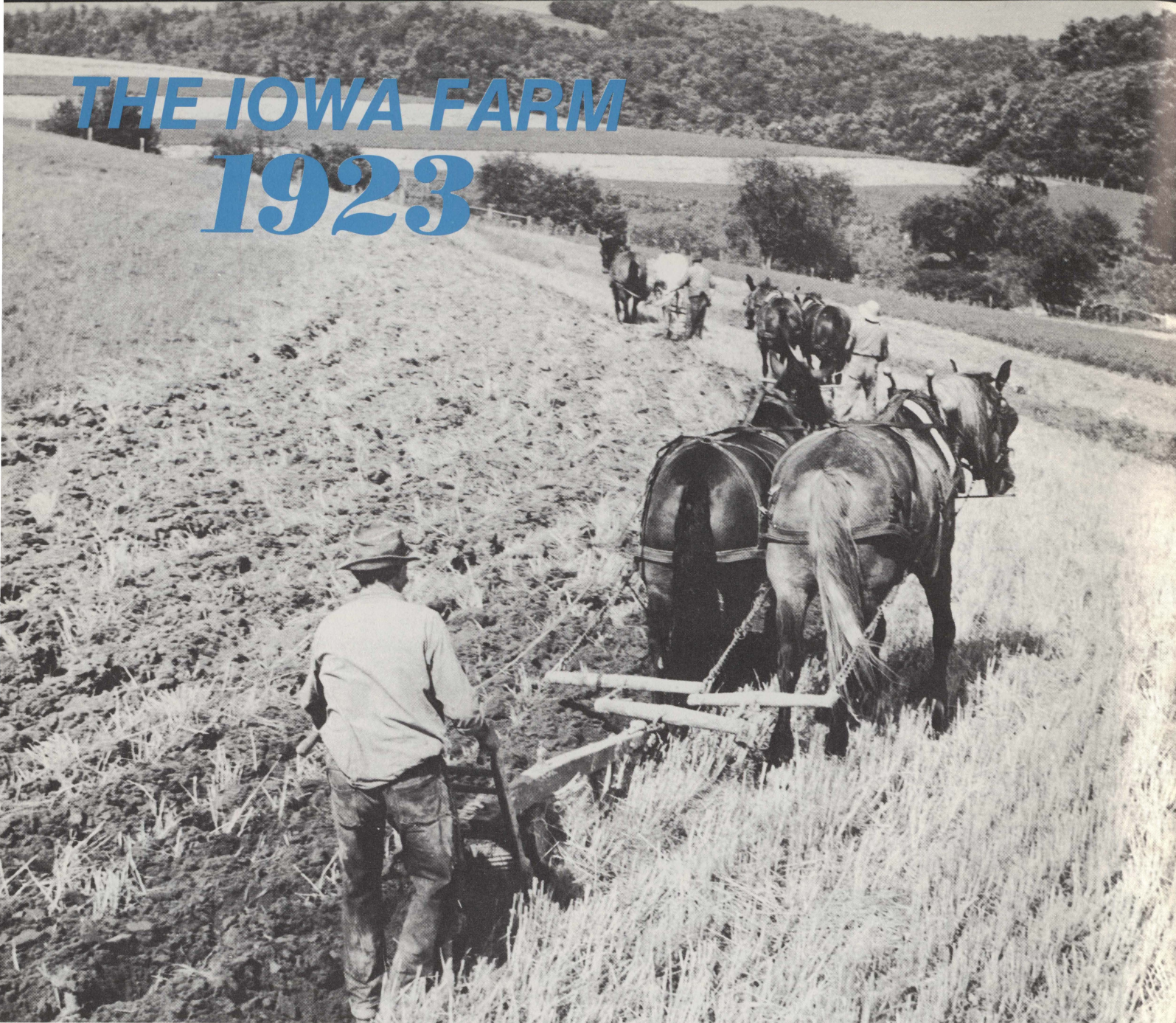
This kind of production record certainly doesn't harm the Iowa economy either. It bolsters State coffers with tax dollars, beckons enticingly to new industries, and encourages Iowa youth to proudly follow their industrious fathers in a continuous search for new and better ways to keep their product excellent.

Long ago Iowa Agriculture stepped up from its seemingly monogamous marriage to the yellow corn and affianced itself (with unparalleled success) to an attractive variety of other products. So, in keeping with world opinion, it is time for **all** of us to recognize the many contributions made by the Iowa farmer.

Now! Say "Iowa". What do you see?



THE IOWA FARM 1923



It was the year 1923 and yesterday belonged to the ox team, the sickle, cheap feed, cheap labor and raising beef for weight regardless of age and cost of feeding. The new year began the age of motorized agriculture, electricity and a new prosperity.

It saw the farmer coming into his own as an important factor in the selection of legislators and the beginning of the farm bloc proving effective in molding national legislation. It was the fourth year for the American Farm Bureau Federation, the first powerful farmers' organization. Through it came a move for cooperative marketing movements along the line of livestock, grain, dairy products, fruits and vegetables. Within the year they accomplished an intermediate credit bill to take care of marketing and production needs.

For the farmer the cost of living was increasing faster than his profits. Retail cost of food was higher

while the farmer was getting little more for produce, and livestock declined to only eight percent above the 1913 level.

From the Civil War to the turn of the century, the one outstanding thought in agricultural activities was to increase production. It could be called a period of better seed and better livestock production. Science became involved, but even then the farmer too often found it did not pay. Then came a new school of thought that said the keeping of cost accounts and the study of farm management would solve all problems. "Balance your farm operations," was the answer. Next came the discovery that something was rotten in the markets.

So in 1915 the Federal Bureau of Markets was established. Thus it was discovered a lot of farm products were being marketed without regard to quality.

Next came the move to create standards, and so 1923 had 20 U.S. standards for farm products with more coming swiftly. Standards for livestock and meats would be next.

The Bureau of Markets turned to inspection service, with the year seeing grain inspection service, a cotton futures act, a warehouse act, and the stockyard packer control act. This year of agricultural activity might be called one of market control.

Following World War I the market went to pieces. Farmers had overproduced, foreign outlets diminished and transportation was totally inadequate. In 1922 farmers produced 100 million bushels more potatoes than needed and 1923 would probably bring a surplus of both hogs and cattle. The Market News Service of the Bureau of Markets set out to provide information on what to produce, when to sell and how to market with the hope of improving balance.

Agricultural marketing was difficult for the weather then, as now, could not be controlled and the farmer could not always produce the quality desired. He did not as a rule know market demands, and was not familiar with prices and market conditions. He couldn't shut up shop when prices fell and production couldn't be quickly increased or decreased when demand changed.

Farm sentiment was high for a more liberal immigration law, but it was doubted if the five percent quota permitted would be enlarged. This caused a shortage of common labor and farm labor. Fortunately the Department of Commerce established a farm bureau which operated all over the country, placing 100,000 men and women at work on farms. It was necessary to have migrations from the wheat fields of the Dakotas to the cotton fields of Texas and Louisiana. Without this aid there would have been a real shortage.

Iowa farmers fought an amendment to the constitution that was to prohibit the issue of tax-exempt securities. The object of this tax-free loan system was to make improvements that would contribute to the general welfare of all the people. Cheaper money was available to develop farms, build roads, erect schools, pave streets and lay sewers. Getting rid of tax-exemption would seriously cripple, if not destroy the Federal Farm Loan System. It would add \$80 million to the farmers' annual interest bill. And the farmers had no one to pass it along to.

In spite of all these problems, Iowa produced 437 million bushels of corn on 11 million acres for an average of 40½ bushel per acre, at 75 cents per bushel, an average worth of over \$327 million.

Iowa had 4,545 head of cattle worth \$172 million, an average of \$37.50 per head. Hogs were 11½ million, worth \$169 million or \$14.50 a head.

Soybeans came to 120,000 bushel on 10,000 acres, averaging 12 bushels per acre, worth an average \$330,000 or \$2.75 a bushel.

Iowa had 35 million acres in farms with 214,000 farms averaging 159 acres valued at \$168 an acre.

It was decided in 1923 that farmers would have to adjust to lower wheat acreages since wheat exports the year before were 279 million bushels and this year it was expected to be only 222 million bushels.

With all these problems, life on the farm was improving. Electricity was coming slowly. A Buick six-cylinder touring car could be had for \$1,195. The horse market was improving, the sheep industry growing slowly. A farmer in Marshall County, Iowa, found that with proper fertilization he could average 76 bushels to the acre at a cost of 52 cents. President Harding died and Calvin Coolidge became president.

One of the big questions: Shall I buy a tractor? It was found that tractors replaced 2.2 work horses per farm, one or more hired men, saved on feed, increased yield and increased the size of farms. Drawbacks were: excessive first cost, depreciation, high fuel and oil prices as compared with horse feeds, and higher cost of implements because of larger sizes and heavier construction.

It was prohibition and the rum runners, bootleggers and moonshiners killed 33 federal prohibition officers.

Farm people began taking advantage of the pleasure and information obtained by radios. An estimated 145,000 radio sets were on farms, with federal weather forecasts, crop reports and market quotations being broadcast from 150 radio stations throughout the country.

The year ended on a note of hope, with one big complaint. The National Industrial Conference board said one person in every 11 of the population over 16 years, is on public payroll, costing \$3.5 billion a year. With a commission added here and an investigation going on there, the government, farmers felt, was getting to be very cumbersome. Offices were overloaded with help who must, of necessity, loaf part of the time. For this, the farmer pays. In spite of this the year was expected to end with \$138 million on the right side of the ledger in the U.S. treasury. The year before had ended with a balance of \$30 million.



For over 50 years, farming has been Iowa's largest industry.

These years of evolution turned Iowa farming from a family venture of hard labor and limited rewards into a commercial venture, with the farmer's output per hour increasing three times faster than non-farm industries.

Even before production on the farm begins, another phase of farm industry makes and distributes the machinery, fuel, chemicals, fertilizers and other goods and services used by Iowa farmers. And after production another phase processes and manufactures these products into consumer goods.

Iowa has \$4.5 billion realized gross farm income, with farmers spending over \$4.0 billion a year. The Iowa farm machinery industry employs 24,600 people with another 55,000 in food processing according to 1970 figures.

This fantastic increase is in spite of fewer farms today. Within the past 10 years, the number dropped from 183,000 to 141,000, with an average size increase from 190 to 247 acres.

Specialization came to the farm. Where once the average farmer raised some hogs, dairy cows, steers and chickens, he now often selects one commodity in which he specializes. Where crops were formerly varied, now he is apt to grow only one or two.

This trend came as Iowa farmers learned to shift from one type of farming to another as circumstances demanded. With changes came a big investment in more efficient production methods, new techniques and new equipment. Of necessity, the farmer became a scientist, a financier, marketing expert and production specialist. He became skilled in management, law and politics and modern business practices.

Due to these changes, farm productivity has risen nearly 500% since 1945. A new balance of capital investment is partly responsible for this. Around 1900, capital constituted around 20% of all inputs in agriculture. An Iowa State University study notes that it is now close to 70%.

Iowa exports have helped. In 1972, Iowa ranked third in the value of foreign agricultural exports. Within 20 years agricultural sales volume to foreign coun-

IOWA FARM PRODUCTION 1973*

tries increased 600%... from \$104 million to \$620 million. This provides new income for improving farm operations, for increasing production and raising the farmer's standard of living.

Big business farming produces more than twice as much wealth as all the gold mines in the world on 25% on the nation's Grade "A" land, producing 10% of the nation's food supply. Cash receipts during 1970 totaled \$3.8 billion. Iowa ranked third that year in agricultural exports of \$505 million including \$135 million worth of feed grain, \$167 million of soybeans, \$49 million of protein meal, and \$25 million of meat and meat products.

CORN

Corn is still king in Iowa with the average yield hitting an all-time high of 114 bushels per acre in 1972. That's 58 bushels higher than 15 years ago. This totaled over 1.2 billion bushels, ranking Iowa first in the nation, representing a value of \$1.5 billion and a gross income of \$668 million. This was 16½% of Iowa farm income. Production per farmer totaled 8,891 bushels or 497,896 pounds. Half of the crop was fed on the farm, and half was sold, with 30% going to export.

This high yield is due to superior gene stocks and inbred lines developed by research at the Iowa Experiment Station in cooperation with the USDA. For example, corn borer resistance held the 1968 loss to about 50 million bushels despite the high corn borer population. Before the present types of resistance were bred into commercial hybrids, losses have totaled more than 200 million bushels a year.

SOYBEANS

Each Iowa farmer raising soybeans produces about 1,300 bushels, or 78,000 pounds, ranking the state second. This is a total of 218 million bushels at a value of \$774 million, with a gross income of \$566 million or 14% of Iowa farm income. About 98% is sold, with nearly half exported.

PORK

Iowa also ranks number one in pork production with a total of 5.2 billion pounds of pork at a value of \$905 million with a gross income of \$952 million. This represents 24% of Iowa farm income. Each farmer, averaging 38,304 pounds of pork, is responsible for feeding 524 Americans. 73% of this production is consumed inside the U.S., and 96% consumed outside of Iowa. This represents 24% of the total U.S. production.

Confinement hog raising takes much of the drudgery out of livestock chores. Work in baby pig nutrition led to weaning pigs at three to four weeks of age instead of eight to ten; marketing hogs at five months instead of six and a half, and saving 220 pounds of feed per hog. Early weaning allows a sow to farrow more litters per year. Hog raisers found they get bigger litters from slimmer mothers and so feed 25 to 50% less. Breeding and selection research led to bred-in ability to gain faster, use feed more efficiently, producing more lean muscle and less lard.

Within the past 12 years, the lean pork yield per hog has gained the equivalent of half a ham and a third of a loin, with a lean average of 40% of the carcass weight in closely trimmed ham and loin. Meat packers find a third less lard... only 22 pounds compared with 33 pounds.

Iowa also has the advantage of efficient production of corn and soybeans, plus supplements, which are today's basic ingredients of hog rations. This strengthens Iowa's competitive position in hog production.

BEEF

Iowa ranks second in the nation in production of beef, with over 4.5 billion pounds slaughtered in 1972 alone. Dressed weight production amounted to slightly under 3 billion pounds, with gross income to farmers amounting to over \$1.4 billion. This accounts for 35% of the total Iowa farm income. Beef consump-

tion in the U.S. averages 113 pounds per person. Each Iowa farmer is responsible for enough beef to feed 194 Americans, with 90% of Iowa's production consumed outside the state.

SHEEP

Iowa farmers raise approximately 46 million pounds of sheep each year with a gross value of about \$18 million, less than 1% of Iowa farm income. On an average, each farmer produces 345 pounds, or the mutton consumed by 111 Americans, 82% of which is consumed outside Iowa. This represents 5% of the total U.S. production.

POULTRY

In the production of poultry, Iowa produces over 130 million pounds of turkey and 30 million pounds of chicken, grossing \$1.5 million, and \$26.5 million, respectively. This represents less than 1% of Iowa farm income, but places Iowa 6th in poultry throughout the U.S. Each farmer provides enough poultry to feed 156 Americans, 81% of which is consumed out of state.

DAIRY

Iowa produces 4% of the U.S. dairy products, with gross income amounting to over \$227 million, or 5½% of Iowa farm income. Average dairy production per farmer feeds 90 Americans, with 77% consumed outside Iowa. Iowa ranks 6th in the U.S. for dairy production.

EGGS

Iowa chickens lay 2.8 billion eggs each year, grossing Iowa farmers about \$56 million, or 1% of the Iowa farm income. Americans consume per person 322 eggs yearly while average farm production is 21,192, this means each Iowa farmer feeds 65 Americans, with 70% consumption outside Iowa. Iowa takes credit for 4% of the total U.S. egg production.

POPCORN

Iowa produces 136.5 million pounds of popcorn, ranking first in the U.S.



*Figures quoted refer to 1972 production

THE IOWA FARMER

Donald F. Doolittle, Blairsburg, is a family farmer but he is also a businessman, an investor, an agronomist, a chemist, a veterinarian, an engineer and a community leader.



As a businessman . . .

Doolittle has expanded a \$560 land purchase made by his grandfather in 1884 to a capital investment in 1973 to a conservative \$600,000.

His grandfather paid \$3.50 an acre for 160 acres 89 years ago. Today this land is worth from \$800 to \$900 an acre. Doolittle still has this land, plus 560 more acres in Hamilton County, Iowa.

Doolittle farrows and feeds out 1,000 hogs a year, fattens 125 cattle and row crops 600 acres.

A son, Dennis, 28, farms with Doolittle. Dennis studied farm operations at Iowa State University for four years and is a Vietnam War Veteran. Another son, Royal, 22, will join the partnership this year (1973) after graduation from Iowa State in Agriculture Busi-

ness. Doolittle is a graduate of the State University of Iowa, majoring in business and economics.

As an investor . . .

Doolittle tries to put his money where it will earn him the most profit, like the \$70,000 invested in field tile on his farm.

"I had a smart professor in economics at Iowa City and before returning to the farm after graduation, I worked a year in a West Coast Bank. I learned you can make money on inflated land. Two years ago I invested \$80,000 in land. The inflated value of that land is now \$145,000. If I had put that money into a confinement hog shed, it might take me three to five years just to get it paid off."

Doolittle functions as a volume pork producer by making the most of existing buildings and combining drylot and pasture finishing. "It's not as convenient as total confinement, but you don't tie up a huge capital investment," he explained.

Doolittle keeps records with the Central Iowa Farm Business Association. For years he has been in the top one-third of this group in terms of management return and he uses his records for direction in farming.

For instance, he used to keep a very low machinery investment per rotated acre. Now it's up to \$55 an acre. Accounting for this increase is a recent \$40,000 investment in a 6-row combine and a high-powered tractor.



Don Doolittle and sons, Dennis and Royal

"I needed this equipment in order to farm my increased acreage and the higher yields and prices of corn and soybeans have justified this investment," Doolittle commented.

As an agronomist . . .

Doolittle has to decide which seed varieties to plant and how much fertilizer he can justify. With seed corn costing \$9 an acre and fertilizer costing \$25 an acre, a wrong selection could be disastrous.



As a chemist . . .

Doolittle has far-reaching decisions to make about his choice of herbicides and pesticides. These chemicals represent a combined initial investment of about \$10 an acre but the wrong choice of a chemical or a mistake in application procedures could wipe out a whole corn crop or destroy a soybean field.

As an engineer . . .

Doolittle has to keep a fleet of pickups, tractors and other equipment in tip-top shape. He does minor repairs in his shop, but depends on his dealer to stand behind his equipment. "Your machinery is no better than the dealer," Doolittle believes. As an engineer, Doolittle also has to keep buildings in good repair and a special undertaking in 1973 was the renovation of an old house into a comfortable farm home for Dennis and his wife, Pam.

As a veterinarian . . .

Doolittle realizes that he is a veterinarian by experience, not by degree. "I do the simple things myself and call on a licensed veterinarian when I get into real trouble like pig abortion or a disease outbreak," he said.

Both Doolittle and his father, Fred Doolittle, who died in 1959, were formally recognized as Master

Swine Producers. Doolittle has earned this award by raising big litters at least cost and getting them to market fast. Over the years, he has averaged an impressive \$1.65 return per \$1.00 worth of feed fed on his farm.



The Doolittle family

As a community leader . . .

Doolittle has been active in the Iowa Farm Bureau Federation, the Tri-County School Board, the Central Iowa Business Association and his local church, St. Mary's Catholic Church. He is a Secretary of the Blairsburg Cooperative Elevator, and is a Director of the Farmers' National Bank in Webster City.

"You learn by getting involved and sharing in your community. Life is a continual learning process. Farming is like that too, you've always got to keep on pushing ahead and try new ideas to make it a success," Doolittle concluded.



Iowa Department of Agriculture

50TH ANNIVERSARY

During a half century of service to Iowa's great agricultural industry, the Iowa Department of Agriculture has been dedicated to the development and promotion of Iowa's abundant agricultural resources.

Since the establishment of the Department in 1923, Iowa agriculture has grown and prospered. Today Iowa leads the nation in all livestock marketing. Twenty-five percent of the nation's pork supply and 16 percent of grain fed cattle are marketed in Iowa. Iowa produces more corn in most years than any other state in the United States and Iowa is second in soybean production.

The economic investment in Iowa agriculture is staggering . . . over \$18 billion invested in Iowa land, crops, livestock and machinery. Each year Iowa farmers earn more than \$4 billion from their investment but this is only part of the story. Every \$1 in farm income generates at least \$3.50 income up and down main street, in the factories and offices of Iowa towns and cities.

In fact, eight out of 10 Iowa workers depend directly or indirectly upon agriculture for their jobs. This economic fact is the weather-vane for Iowa's future.

The next few pages of this special edition tell how the Iowa Department of Agriculture serves Iowa agriculture and has helped to serve and promote agriculture at home and abroad.

By itself, the future of agriculture in Iowa has never looked brighter. Iowa's rich soil already produces more wealth each year than all the gold mines in the world. But the growing need for food in America and abroad will place even greater demands on Iowa's highly efficient partnership between industry and the farmer. Looking at the record, prospects for meeting this challenge are very good.



Iowa Department of Agriculture

R. H. LOUNSBERRY
SECRETARY OF AGRICULTURE



STATE CAPITOL
DES MOINES, IOWA 50319
GOLDEN ANNIVERSARY
1923 1973

June 23, 1973

THATCHER JOHNSON
DEPUTY SECRETARY OF AGRICULTURE

To the People of Iowa:

The Department of Agriculture, in celebrating this 50th year of its establishment and service to this great state, wishes to extend greetings to the people of Iowa.

This portion of Iowa's Salute to Agriculture is designed to give you, the public, a review and current report on the Iowa Department of Agriculture which was established in 1923. The state legislature prescribes the manner in which the department carries out its various duties. The different divisions in the department are responsible to the Secretary.

In connection with our work in helping to safeguard the health and welfare of our citizens, it is our aim at all times to cooperate with other state and federal agencies and all cities and towns.

We are glad to have a part in the growth and development of this department of state government. We are grateful for your help and cooperation enabling us to maintain our service in a manner to be of maximum worth to the welfare of the people of our state.

Sincerely,

R. H. Lounsberry
Secretary of Agriculture



Robert H. "Bob" Lounsberry, elected Iowa Secretary of Agriculture November 7, 1972, for the 1973-74 term was born in Carlisle, Iowa, on June 22, 1918. He was educated at McCallsburg High School and was graduated from Luther College at Decorah with a B.A. degree. He also attended the University of Iowa Medical School for two years.

His studies were interrupted by World War II, during which Lounsberry served with the 7th Air Force in the Pacific Theatre flying heavy bombers on numerous missions. As a combat pilot, he received five battle stars, the D.F.C. Air Medal with four oak leaf clusters and various other medals for bravery under fire and bringing back a crippled plane and the crew with no loss of life.

After the war, Lounsberry farmed for 25 years near McCallsburg and still resides at his family home there, when not in Des Moines, although he does not now actively farm the 320 acres.

Lounsberry was married to Miss Muriel Dirks of Decorah shortly before World War II. They are the parents of three sons and two daughters, all raised on the farm at McCallsburg, and all now married.

Lounsberry has been a strong supporter of vet-

erans' organizations and is a Past Commander of the Iowa American Legion. He was National Executive Committeeman for five years and is a member of the V.F.W. and the 40 and 8. His oldest son William served in the Vietnam war and is currently stationed in Hawaii.

Other responsibilities which Lounsberry has taken in the community are: school board member for 19 years; a director of the Iowa Association of School Boards and the Area XI DMACC Vocational School; an elder and teacher in the Presbyterian Church; a member of the Masonic Lodge No. 99 AF & AM, Nevada; a member of the Des Moines Consistory; Za Ga Zig Shrine; Story County Director and State Director of the Society to Aid Crippled Children; and Story County and Fifth District Republican Chairman.

In addition to actual farming experience, Lounsberry has served on many farm groups. He is a former ASC Committeeman, Past President of the Story County Beef Producers and Past Chairman of the Story County Farm Bureau Legislative Committee.

He was Deputy Secretary of Agriculture for four years before becoming Secretary.

SECRETARIES OF THE IOWA DEPARTMENT OF AGRICULTURE

(established June 23, 1923)



Raymond W. Cassady
1923-1924



Mark G. Thornburg
1924-1932 1939-1942



Ray Murray
1933-1936



Harry D. Linn
1943-1949



Clyde Spry
1950-1961



L. B. Liddy
1961-1964 1967-1972

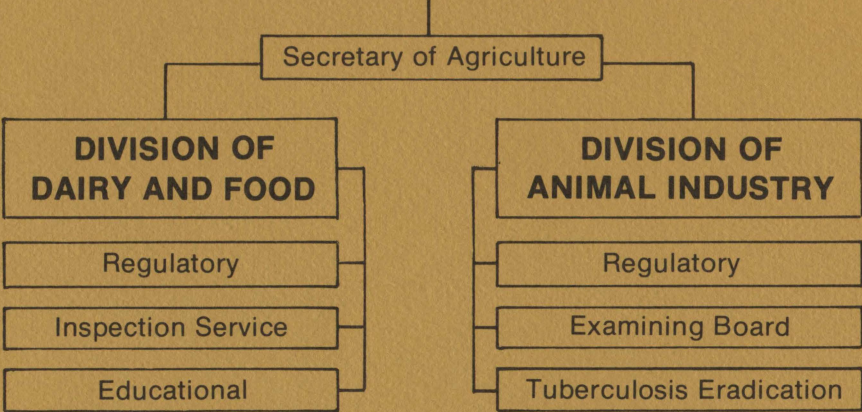


Thomas L. Curran
1937-1938

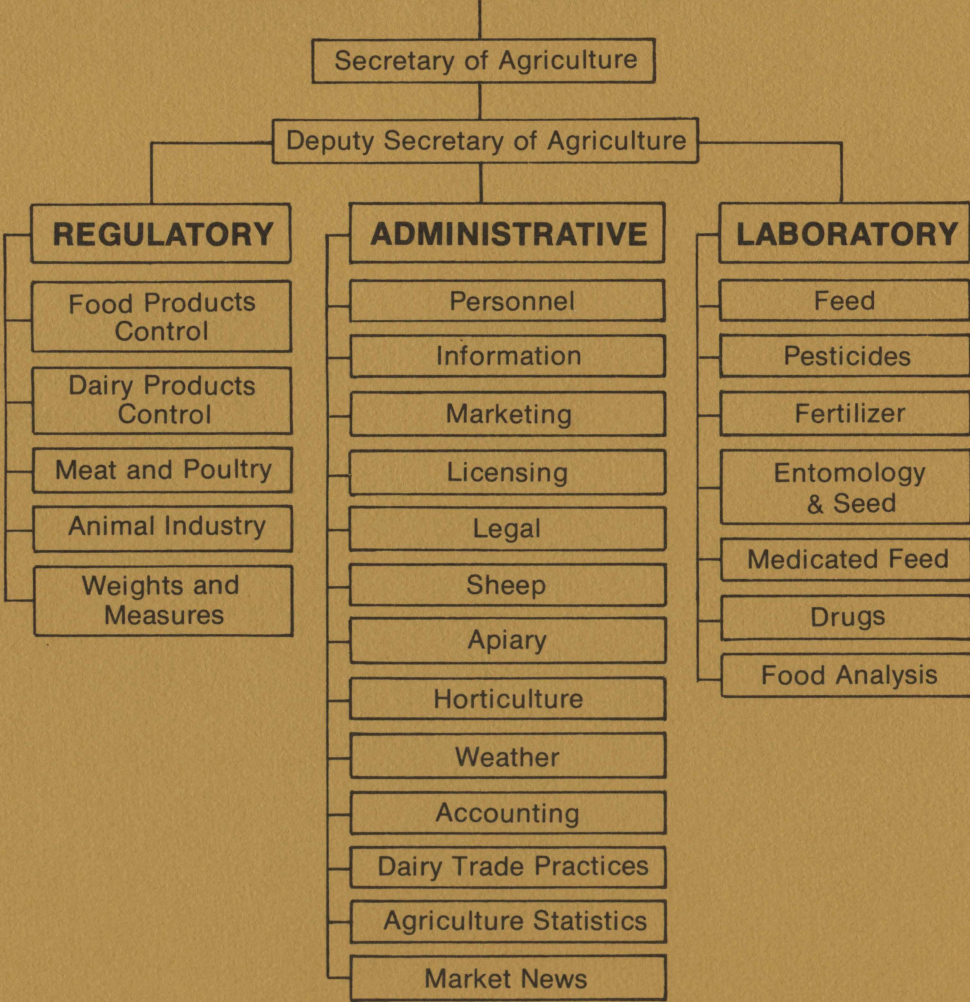


Kenneth E. Owens
1965-1966

ORGANIZATION CHART IOWA DEPARTMENT OF AGRICULTURE 1923



ORGANIZATION CHART IOWA DEPARTMENT OF AGRICULTURE 1973



HOW THE DEPARTMENT OF AGRICULTURE IS ORGANIZED

REGULATORY

Food Products Control: Restaurant Inspection—Inspects hotels, motels, resort places, restaurants, cafeterias, drive-ins, soda fountains, taverns, cocktail lounges, mobile lunch units, food stands at fairs. Checks salvage of food from wrecks, fires, floods and tornadoes.

Pure Food Inspection: Inspects grocery stores, supermarkets, wholesale houses, bakeries, pop factories, canning factories, fish dealers, fruit and vegetable places, egg dealers and processors. Enforces adulteration and labeling laws. Checks salvage of wrecks, fires, floods and tornadoes.

Dairy Products Control: Conducts a state-wide program of dairy products control. Regulates Grade A fluid milk processing and the manufacturing of grade milk and dairy products.

Meat and Poultry: Enforces meat and poultry laws and follows Federal Wholesome Meat Act. Conducts antemortum and postmortum investigations. Exercises processing, reinspection, sanitation, licensing, regulatory and registration control. Cooperates in state and federal cooperative agreements.

Animal Industry: Conducts Brucellosis eradication, hog cholera eradication and tuberculosis control (all species) programs. Inspects livestock auction markets and exercises contagious disease control at auction markets and rendering plants. Licenses veterinarians and registers cattle brands. Register feeder pig dealers.

Weights and Measures: Inspects all meters and scales and moisture testing devices and conducts petroleum products samplings. The State Sealer adjusts the weights and measures used by state inspectors as well as those used by commercial repair and industrial concerns.

ADMINISTRATIVE

Personnel Director: Works with the Secretary and Deputy Secretary of Agriculture and with Iowa Merit Employment in selection and hiring of 283 agricultural workers. Keeps personnel records on all workers and keeps informed on rules and regulations pertaining to employment such as IPERS and civil rights legislation.

Information Specialist: Prepares and distributes press releases at request of Secretary and Deputy Secretary and Division heads. Prepares information material for public benefit through media of the newspaper, radio, television and magazine. Cooperates with other state agencies in disseminating agricultural information and education, and is asso-

ciated with the National Association of Communicators of the State Departments of Agriculture.

Marketing: The Marketing Division and the Marketing Board of Commodity group members is directed by Iowa law to aid in "more advantageous marketing of Iowa agriculture products." Its operations fall into three general categories: Promotion, Research and Service. Promotion activities include production and distribution of films and brochures and food promotions. Research work is done in cooperation with land grant colleges, government and private organizations. Service includes preparation of several Market News Reports used by Iowa and mid-west farmers, work to improve Iowa's farm commodity transportation system, development of a photo library, and a program to encourage Iowa farm product exports in cooperation with eleven other midwest states and the U.S. Department of Agriculture.

Legal Counsel: Assists the Secretary and Deputy Secretary of Agriculture in the Administration of the Department. Coordinates activities between various divisions and implements new legislation. Serves as a Hearing Officer when revocation of Department issued licenses to private or corporate firms is being considered. Also serves as a liaison officer between the Department and the Attorney General's office and other legal oriented agencies.

Licensing: Supervises the preparation and distribution of license to various business establishments such as restaurants, hotels and taverns and elevators and fertilizer plants which are required by law to be licensed by the Department.

Sheep: Promotes the consumption of lamb, the use of wool, and the quality of marketing of these products. Also promotes activities which are of benefit to the industry such as recognition banquets and youth awards for sheep management.

Apiary: Lectures and gives demonstrations and inspects the production care of bees and honey.

Horticulture: Lends direction, continuity, leadership and administrative services and guidance to implement the horticulture industry in Iowa.

Weather: Forecasts frost, flood and storm warnings, weather and crop summaries.

Accounting: Prepares payrolls, presents budget recommendations and performs various other business functions, including the paying of bills and vouchers.

Dairy Trade Practices: Keep alert to prevent the use of certain unfair practices in production of milk and

ice cream which tend to lessen competition and create a monopoly.

Agricultural Statistics: Prepares annual state farm census and other research data such as production figures, utilization of feed grains, grain stocks on hand, price variance and marketing data on crops and livestock.

Market News: Report daily prices, volume, receipts, movement of livestock, poultry and agricultural products.

LABORATORY DIVISIONS:

Feed Section: Licenses feed mills. Registers and analyzes feed and stock tonic products.

Pesticide Section: Registers and analyzes pesticide products. Licenses pesticide applicators and monitors consumer products for pesticide residues.

Fertilizer Section: Licenses and registers fertilizer plants and products. Collects, compiles and distributes data on plant food consumption. Approves, inspects and regulates all Anhydrous Ammonia installations. Licenses, samples, evaluates and certifies all limestone quarries.

Entomology and Seed Sections: Analyze and test agricultural seeds that are transported and sold for seed. Inspect nurseries and implement state-wide pest and plant infestation control.

Medicated Feed Section: Inspects Medicated Feed in accordance with Food and Drug Administration rules and regulations. Analyzes med-feed to determine the drug levels contained in the feed.

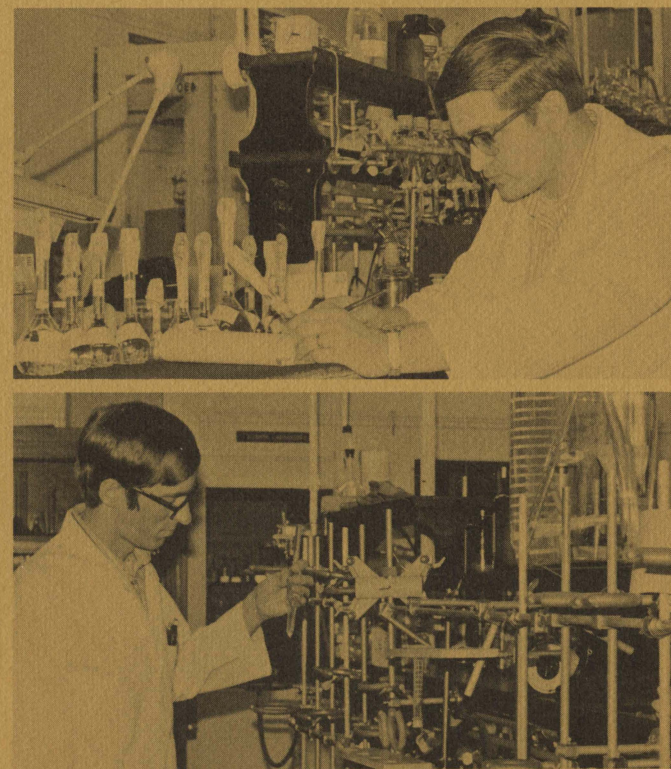
Drug Section: Analyzes drugs in state laboratory.

Food Analysis: Analyzes dairy, food and meat samples from Department inspectors. Provides state laboratory certification.

A brief look at some of the people and activities of the Department today.



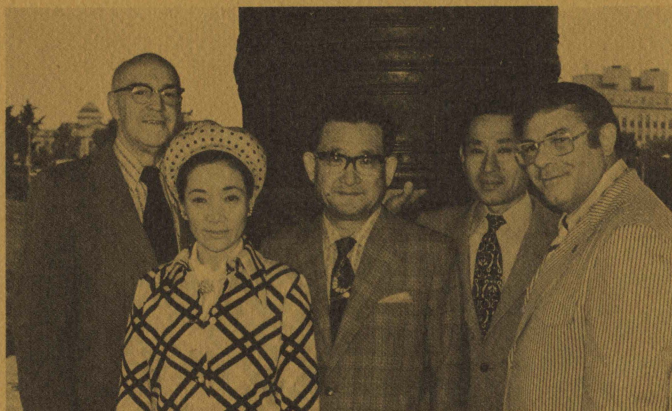
E. A. Johnson (left) Food Service Survey Officer for the Iowa Department of Agriculture, checks temperature control in food serving center of the State Capitol Cafe, Des Moines, while Chef Richard E. Anderson looks on.



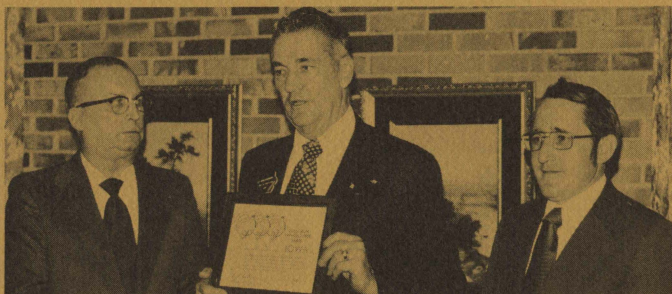
James Leseney (top photo) and Dwight Harder, chemists with the Iowa Department of Agriculture, examine milk samples for pesticide residues in the Department's laboratory in Des Moines.



Thatcher Johnson (right) Deputy Secretary of Agriculture, and Norman Still, Iowa Grain Dealers Association, are pictured as they made plans for the 1973 Salute to Agri-Culture. Johnson was General Chairman of the event and Still was Parade Marshall.



L. B. Liddy (left) Secretary of Iowa Agriculture from 1961-64 and 1967-72 was photographed at the Capitol Grounds in 1972 with television people from Iowa's sister city in Japan. Liddy commented "Iowa has helped feed the nation for years, now it is helping feed the world. The food we produce can help unite the world physically and spiritually as we realize we are our brother's keeper and share our bountiful blessings one with another."

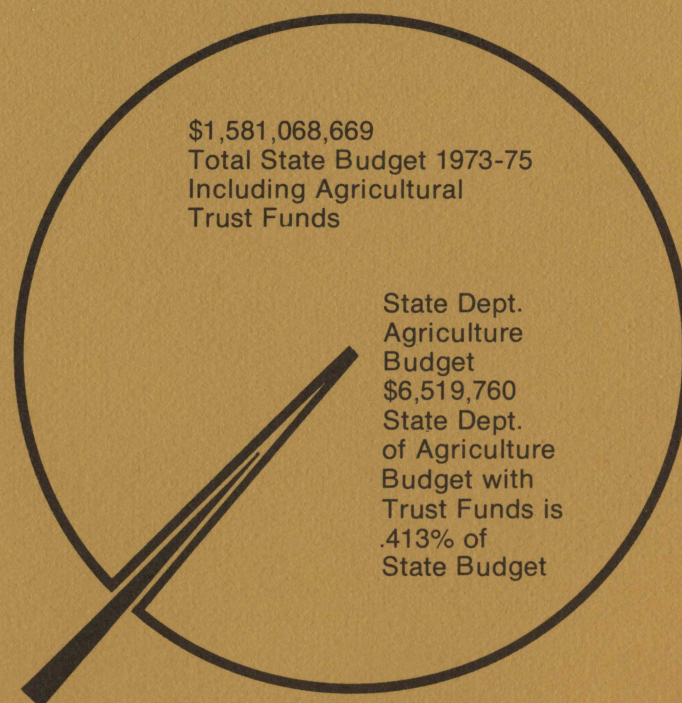


Thirty years of Agricultural Research was climaxed in Ames, Iowa, on April 17, 1973 when a USDA certificate recognizing Iowa as being free of pullorum disease and typhoid in turkeys was presented by Dr. Claude Pflow of Washington, D.C. to Robert H. Lounsberry, (center). Taking part in the ceremony was David Roth, (right) Wayland, Iowa, President of the Iowa Turkey Federation.



The quality and price of consumer meats was big news in the 1970's. This photo was taken in Sioux City, Iowa, in April 1973 as Robert H. Lounsberry, Secretary of Iowa Agriculture talked with television reporters about misrepresentation of meat cuts and products in restaurants and food establishments.

1973-1975 IOWA STATE DEPARTMENT OF AGRICULTURE BUDGET



THE EVOLUTION OF FARM EQUIPMENT

Fifty years ago, an Iowa farmer contemplating spring planting would have been pondering whether to switch from horses to a tractor. Or, if he had already decided to step up to steel horsepower, which of the 180 or so makes of tractors would do the best job for him.

In 1973, Iowa farmers still ponder their equipment selections. But not because they have to decide between so many tractor manufacturers. Rather, because they have such a wide choice of tractor sizes and tillage, planting, harvesting, and storage alternatives. Together, these offer him a myriad of sophisticated combinations for matching his land, type of operation,

labor supply and wishes. His initial choice is difficult enough — a tractor with an 80 horsepower naturally-aspirated gasoline engine that pulls a plow with five 14-inch bottoms or a turbocharged 125 horsepower diesel tractor with six 16-inch bottoms, for example. Or would he be better off investing in a 4-wheel-drive giant capable of towing eight 18-inch bottoms at 5 mph or a 32-foot-wide chisel plow at 6 mph? How big should his next self-propelled combine be? Should he jump now from 6 to 8-row planting — which also means new cultivating and harvesting machines to match?





But add in all the options and variations available and the choices become even more complex: Cab (air conditioned and/or heated). Dual rear wheels or oversize tires. Power-shifted transmission. Plain or notched disc blades, 18 or 20-inch size. Liquid or dry-type fertilizer hoppers. And on and on.

Certainly, equipment selections aren't his only concern. But, since almost everything hinges on crop production, tractors and equipment command a generous slice of the modern farmer's decision-making time.

Hybrid seed corn, commercial fertilizers, chemical weed and insect control, production testing programs, and artificial insemination are just a few of the technologies now in widespread use that were unknown a short half-century ago. These advances have greatly increased the production and efficiency of Iowa farmers.

But, their benefits would be diluted significantly if farmers still had to count on horses to supply the

horsepower. Today's high production per farm, at a high level of efficiency, is possible only because of the farm equipment revolution. Today's arsenal of tractor power and machines is the single biggest reason Iowa farmland feeds so much of the world.

Although machinery doesn't necessarily mean a farmer can grow more food per acre, it does enable him to do more work and to raise his yields by doing the work better and more timely. And by letting us put otherwise non-productive land to use.

The tractor has to be the center of attention when looking at agricultural productivity. During the 20's, development and acceptance of farm tractors grew at a phenomenal rate. The reason is simple. They let one man do much more than he could ever do before. Tractors also freed up for food production, millions of acres that had been tied up just growing horse feed.

While early tractors merely substituted petroleum-power for horsepower, farmers and designers (often the same person) quickly modified horse-drawn plowing, cultivating, planting, and harvesting tools to better utilize tractor power. A whole new source of power was available, too, the power take-off for performing field work on-the-go that was not possible up until then.

Compared with the sleek, powerful, easy-handling, comfortable-riding models pictured on these pages, the tractors of 1923 were rather crude. However, they embodied many of the fundamental principles found in tractors working Iowa farmland now: Enclosed transmissions, carburetor manifolding, air cleaners, enclosed cooling systems, antifriction bearings. Alloy and heat-treated metals.

As with almost any other innovation, early tractors weren't all of sound design. (The number of

manufacturers peaked at 186 in 1921.) Many soon proved to be impractical—and, too often, fence corners and hedgerows became permanent storage spots. Sometimes even before the unfortunate owners had their so-called tractors paid for.

However, the new industry quickly shook its growing pains and the evolution of the farm tractor proceeded at a remarkable pace. To illustrate, pneumatic tires were first fitted to tractors in the early 30's. By 1940, about 85% of the new tractors were already equipped with rubber.

That fast rate of change is still clearly evident today—in more versatile transmissions, quieter and rollover-protected cabs, 4-wheel drives, 1,000-rpm power takeoffs, turbocharged engines, and more and more horsepower.

Consider the growth in horsepower for a moment and what it means in work accomplished. A 1923 tractor ad bragged about being able to "plow 9 acres a day" with this model. Today's big tractors are capable of doing that in an hour or less.

Naturally, this means there has to be equipment that can harness the full capabilities of such tractors. And, in fact, the evolution of farm equipment has kept pace with the tractor revolution.

Today, Iowa farmers use tillage tools and planter squadrons that their fathers and grandfathers would view in disbelief. Multiple hitches tie together wide-span equipment that makes a complete seedbed (and sometimes even plants the seed) in one pass. Today's farmers not only mechanically pick but also shell up to 8 rows of corn on each trip across the field. Or they can grind the ears as they're picked, up to 4 rows at a time with a Self-Propelled Forage Harvester.



But, whether or not a farmer has the scale of operation that lets him use machines of this size (and the vast majority of Iowa farms are not yet ready for the biggest models), he still benefits from the advances coming out of the engineering departments of Iowa State University and the various farm equipment manufacturers. Whatever its size, equipment today does a better job, with less operator effort, than at any time in history.



But, the question often comes up "haven't we about used up all the engineering advances available?"

On the basis of the last 50 years, the answer has to be a resounding "no". In fact, changes now are occurring as rapidly as at any time in the past. And, in the next 50 years, will probably be even more earth-shaking than in the last 50.

The world population seems destined to continue growing. And Iowa farmers will feed even more of the world population in the years ahead. Partly because the farm equipment companies are busy designing new power sources and equipment that will stagger the imaginations of all but the most imaginative people today.

The evolution of farm equipment is far from over!





FAMILY FARM WITH HISTORY

Fifty years ago as the Iowa Legislature was creating the Iowa Department of Agriculture, a momentous event happened on the John Albert Patterson farm in central Iowa.

"We got our first radio, a battery powered radio with twin horns for loudspeakers," wrote John's son, Fred, in 1923.

This notation was one of many which Fred Patterson kept in his journal, a rewarding practice which Patterson continued throughout his lifetime on the family farm near Stratford.

Today, in 1973, the radio is gone and Fred Patterson has been dead for six years, but just as the Iowa Department of Agriculture continues to flourish, the Patterson farm goes on and on, a tribute to the many years of hard work and planning which has kept this family farm functional.

The history of the Patterson farm goes back to



1865, the year that Civil War veteran John G. Patterson homesteaded 155 acres in Section Five of Dodge township in Boone County, traveling to his new home in a covered wagon from Keokuk.

After Patterson's death, his son, John Albert, continued the farm operation until 1927 when Fred Patterson took it over. Fred and his bride, Esther, lived on the farm from 1927 until 1963 and were blessed with three children.

They are Ivan, who has four children and farms near Callender in Webster County, Wendell, who has five children and lives on a small farm near Story City in Story County and works at the U.S. Animal Disease Laboratory in Ames, and Burton, their youngest.

Burton and his wife, Ronda, moved into the Patterson family home in 1963, the year that Fred and Esther moved to a house they purchased in Stratford.

"It was hard to leave but my husband was a wonderful man. He knew that the old must make way for the young in order for a family farm to continue," his widow commented.

"The other boys were already established away from home so it seemed natural that Burton should be the one to take over. Fred helped him until his heart attack in 1967 and his sudden death made us all realize how wise he was in working out a plan so one of the boys could take over," she added.

Burton now farms 320 acres, including the home place of 155 acres. He has 230 acres in row crops and 40 acres in oats and the rest in pasture. He keeps records with a Business Association and his records show it has been profitable for him to expand in



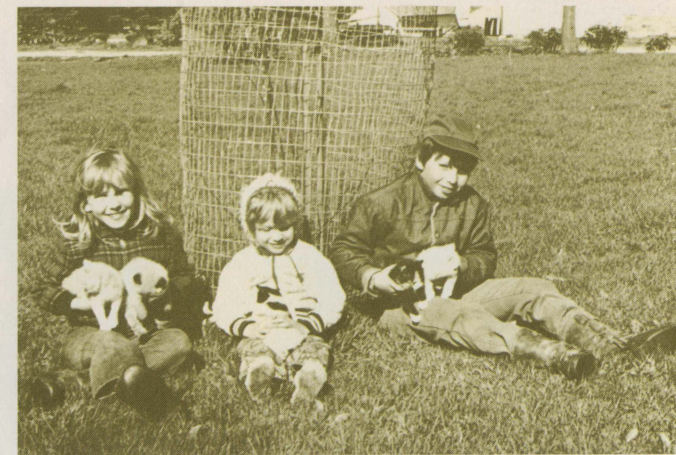
Burton Patterson and his mother, Mrs. Esther Patterson

feeder pigs. He feeds out about 800 feeder pigs a year in batches of 100 and in addition, is developing a Charolais beef-cow herd. He currently has 19 cows and a bull and is increasing the herd every year by keeping back his top heifers from a 90 to 95 percent calf crop.

Burton and Ronda have three children, Nolan, 10, Natalie, 8, and Mia, 5. In April of 1973, Burton repeated a move his father, grandfather and great-grandfather had made years before; he became the owner of the Patterson farm, purchasing it from his mother.

"I'm anticipating that Nolan will want to carry on the tradition someday. He loves to chore with me and already has several hogs of his own and his own savings account. If he does farm, he'll be the fifth generation of Pattersons to farm here," Burton said.

Burton's mother, Esther, has three sons and daughters-in-law and 12 grandchildren to enjoy, but when she visits the Patterson homestead, it gives her a special comfort to see the farm going on and to watch her grandchildren play tag or turn hand-springs on the spacious lawn which she once mowed and cared for.



The Patterson children—Natalie, Mia and Nolan

It is also satisfying for her to read her husband's journal filled with poignant memories from the past which Fred carefully noted, such as:

"Dad got his first Belgian team in 1912, but I like our Morgan breeds for light field work. They only weigh about 1,500 pounds and can really move out."

"Dad and I sowed our first alfalfa in 1913, the first alfalfa seed sown in this community."

"Dad got our first car in 1914, a B-25 Buick."

"In 1919 I bought my first car, a 1919 Model T and it's a real lemon."

"Got my first Angus in 1920; Dad's Herefords go back to 1890."

"The roads are so muddy (a 1920 entry) that a cone of dirt as large as a wheel rolls up and sticks out from the hub for two feet."

"Got our first tractor in 1925, a Fordson but it is subject to overheating since we cracked the block. You need a can of water at each end of the field."

"Got our electricity in 1929."

"We bought a John Deere tractor and two-row cultivator in 1935 for \$375 but still need to raise three colts a year to have plenty of work horses."

Entries like these in her husband's journal in his own handwriting are enriching to Esther Patterson and her offspring and make the family farm more than a tradition . . . it's a living memory.



South Marion Methodist Church, where the Pattersons attend, is over 100 years old . . . about the same age as the farm



THE SCIENCE OF AGRICULTURE

Iowa State University's Agriculture and Home Economics Experiment Station is one of our nation's leading agricultural research centers. The activity of the dedicated staff of this department has benefited all Iowans with a higher standard of living by unlocking and multiplying the potential of Iowa's productive land.

Let's take a look at some of their accomplishments...and a few of the projects now under research.

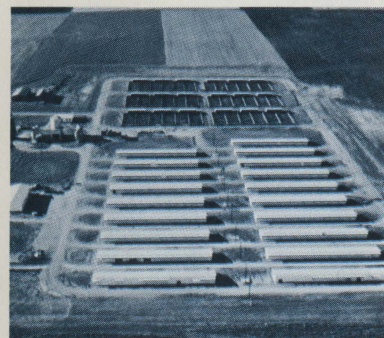
More Efficient Farming

Research has shown the modern Iowa farmer how to save time and labor in crops farming. Today

it takes about 3 hours and 39 minutes of direct labor to grow and harvest an acre of corn, less than half as much as 10 years ago.

The Iowa Station helped develop the big labor-savers in hog production—self-cleaning pens, mechanized feeders and automatic waterers. It pioneered the study of effects of environment on pigs in the Midwest with research on building insulation, ventilation, heating and cooling. Today a farmer can raise a hog to market with less than an hour of labor.

The latest project now under way by Iowa Station is to solve the problem of manure handling, searching for economical ways to reduce odors and prevent pollution.



Mechanizing the handling of such cheap feeds as corn cobs and stalks is another plan designed to boost feeder calf production in Iowa. And research with beef cattle suggests the exciting possibility of inducing multiple births to improve reproductive efficiency for competition in the fed beef market.

Higher Crop Yields

Corn, Iowa's No. 1 crop, leads the way in higher crop yields, with the state average hitting an all-time high of 114 bushels per acre in 1972. That's 58 bushels higher than 15 years ago!

Also, six new soybean varieties were developed by the Iowa Station, along with a new multi-line of oat varieties which are currently available for seeding. An outstanding example of how research provides farmers with help against loss in yield from diseases.

More timely planting, narrow rows, optimum seeding rates and other management practices also help Iowa farmers grow better crops, as do chemical and cultural methods of controlling weeds, insects and diseases. A major research program is now being conducted to minimize the need for chemicals.

Faster Gains from Less Feed

Hog raisers feed bred sows 25% to 50% less than a few years ago. Thanks to research, they make this saving and get bigger litters from slimmer mothers.

Work is continuing on improving the meatiness of livestock itself through breeding and selection—the kind of research that in 12 years boosted the yield of lean pork per hog by an equivalent of half a ham and a third of a loin.

And research is going beyond the animal. Scientists are working on improving the eating qualities of meat, including flavor, juiciness, tenderness and color which affects meat sales. Other studies deal with processing, packaging and preservation.

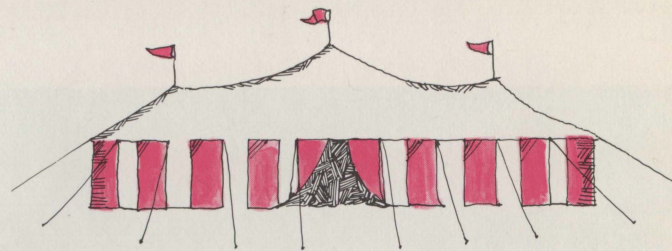
In accepting the challenge to produce food efficiently without polluting our environment, the Iowa Station has 37 different research projects under way at this writing...costing 1.2 million dollars of their operating budget.

Such appropriations by the Iowa Legislature to support the research program of the Iowa Station are a good investment for all of Iowa. Results of agriculture research benefit not only the Iowa farmer but the people of the world as well.

One of the greatest agricultural and livestock shows of the world, the Iowa State Fair attracts people from everywhere in the state, outside the state, and outside the country, too. The present-day sophisticated tableau is a far cry from the first horse-and-buggy affair held in Fairfield, Iowa, in 1854. The latest products of agricultural research... of industrial farm equipment... are surrounded by chess tournaments, society horse shows, stars of stage and screen, visiting dignitaries and pyrotechnic spectacles. But all is not "spectaculars". The heart of the fair and its reason for being is—the Iowa farmer. It's the time for him and his family to display and compare the results of a year of labor.

Several days before the fair begins, hundreds of campers fill the huge Des Moines campgrounds just east of the main fair area. Many are exhibitors getting

THE IOWA STATE FAIR



petted and pampered champion stock steers, lambs, hogs and chickens. It's the ladies competing for the "blue" in everything from home preserves and sewing to skilled artwork and gourmet cookery. It's their



ready for opening day... some are concessionaires hurrying to "set up" for exhibitors and early visitors, but *all* are Iowa State Fair fans. Fans who come back year after year for a week of atmosphere, action, involvement and enjoyment.

Then it begins! A dazzling array of floats, bands, marchers, displays, bicyclists, motorcyclists, fair queens from all over the state and country, Indians and costumes parade by. It's fairtime once again!

It's the younger generation, hopefully eyeing the judge, as they show off



men. Outdoor men who toil daily in the temperamental Iowa climate to produce better livestock... to bring better crops from the rich, fertile land... to give a better way of living to all Iowans.

This is the big fair. Where the finest accomplishments are displayed, the keenest competition is met, the most ideas shared. Fair week is a time of acceleration and, too soon, it's over. Reluctant partings from old and newfound friends. Now, it's packing up, moving out. Saying "goodbye, it's been fun! See you next year—at the fair!"

INVOLVED FARMERS

Iowa agriculture indeed serves the world but it all begins with the family unit.

The Pullin family of Waterloo typifies how Iowa farmers are able to feed a hungry world but in the process can keep strong family ties and reach out to get involved in the community and the nation.

The senior Pullins are Don and Blanche, who live on a 320 acre farm in Blackhawk County just inside the southwest city limits of Waterloo.

Don and Blanche Pullin have two married daughters, Mrs. Roger Osgood of Arcadia, California and Mrs. Marvin Nicol of Waterloo. Their husbands do not farm, but each daughter has three boys and a girl and these children have followed in their mother's footsteps by enrolling in 4-H as soon as they are eligible.



Ronald Pullin with some of his Holstein and Guernsey dairy cows

The Pullins also have two sons and both live close by. Ronald, 36, lives on a 100 acre family-owned farm right next to the 320 acres which his parents rent from a Waterloo retired businessman.

The Pullins' other son, Alfred, 40, farms right down the road from Ronald's farm meaning that all three farms adjoin each other... Ronald in the middle and his parents and brother off to the sides.

Alfred lives on the original Pullin farm of 160 acres which his great-grandfather bought in 1903. His grandmother, Mrs. Anna Pullin, also lives in her own house on this farm.

Anna Pullin, who is an active and busy senior citizen, has been widowed since 1941 when her husband, Russell, was gored to death by a bull. She recalls that when she and her husband bought the original 160 acres in 1923 from Russell's father, they paid \$90 an acre for land which has increased in value at least 1000 percent in the past 50 years.

When Don and Blanche Pullin were married in 1932, they began farming in partnership with Russell Pullin on the home place and another rented farm. "Dad and I farmed 360 acres, milked 15 cows, fed out 100 cattle a year, farrowed 25 sows and had a flock of 50 sheep and lambs," Don said.

Now, Don, who is 64, farms 580 acres in partnership with his sons. "We all share the field work and livestock is all owned in partnership and maintained on the farm that is most convenient.



Alfred Pullin and feeder pigs in confinement barn

Alfred milks 35 Holsteins and Guernseys, and feeds out about 500 hogs in confinement and plans are to expand. Ronald has a milk cow herd of 30 cows and lambs out the flock of 125 registered Hampshire ewes. A \$22,000 grain drying unit is also located on Ronald's farm.



Don Pullin with a walking plow used by his grandfather and Alfred with their new field equipment

Don keeps 40 head of heifers on his farm and at times has some of the registered flock of 125 Hampshire sheep. The 150 commercial ewes are lambed at Alfred's farm. Recognized as one of America's outstanding sheep showmen and judges, Don has shown and judged from coast to coast.

One thing for sure, whatever decision they make it will be a family decision and beneficial to all concerned...the consumer included. That's the way the Pullins do things!

Don won the Master Farmer award in 1953, received the Iowa State University Alumni Achievement Award in 1963, and won the National FFA Distinguished Service Plaque in 1966. He is President of the Waterloo Dairy Cattle Congress, is Chairman of the State Farm Bureau Livestock Committee on Sheep and has been a member and officer of the Hudson Cooperative Elevator for 24 years. He is a past president of the Oxford and Hampshire Sheep Associations and recently completed a two-year term as President of the North Central Wool Marketing Corporation having served as a director since the association was organized in 1959.

His sons, Alfred and Ronald, also attended Iowa State University and are following on in their father's example of livestock judging and showing and participation in industry and community organizations. In fact, Ronald met the girl who became his wife when they competed in sheep judging at the Indiana State Fair.

Alfred has five children and Ronald has three children and like their cousins in Waterloo, all of the on-farm Pullin children are enrolled in 4-H, too.

"When they all get showing at once, they're not easy to keep up with, but it sure is fun," Blanche Pullin commented about the activities of her grandchildren in 4-H.

As the Pullins look to the future, it appears that there will be ample manpower to continue the family role in farming. Besides their daughters, Alfred has one son, Larry, 17, and Ronald has two sons, Douglas,



Don and Blanche Pullin

13, and David, 7.

The Pullins keep D.H.I.A. records and sell Grade A milk but still use stanchions. "We can expand by adding more milking shifts but it would be easier with a milking parlor. It will cost us at least \$40,000 for expansion so we've got to think twice about this," Don said.

"I started out as a teenager to show for profit and enjoyment. Now, with quality rams each selling for \$150 or more, there's more profit in breeding but I still like to show and judge," Don said.

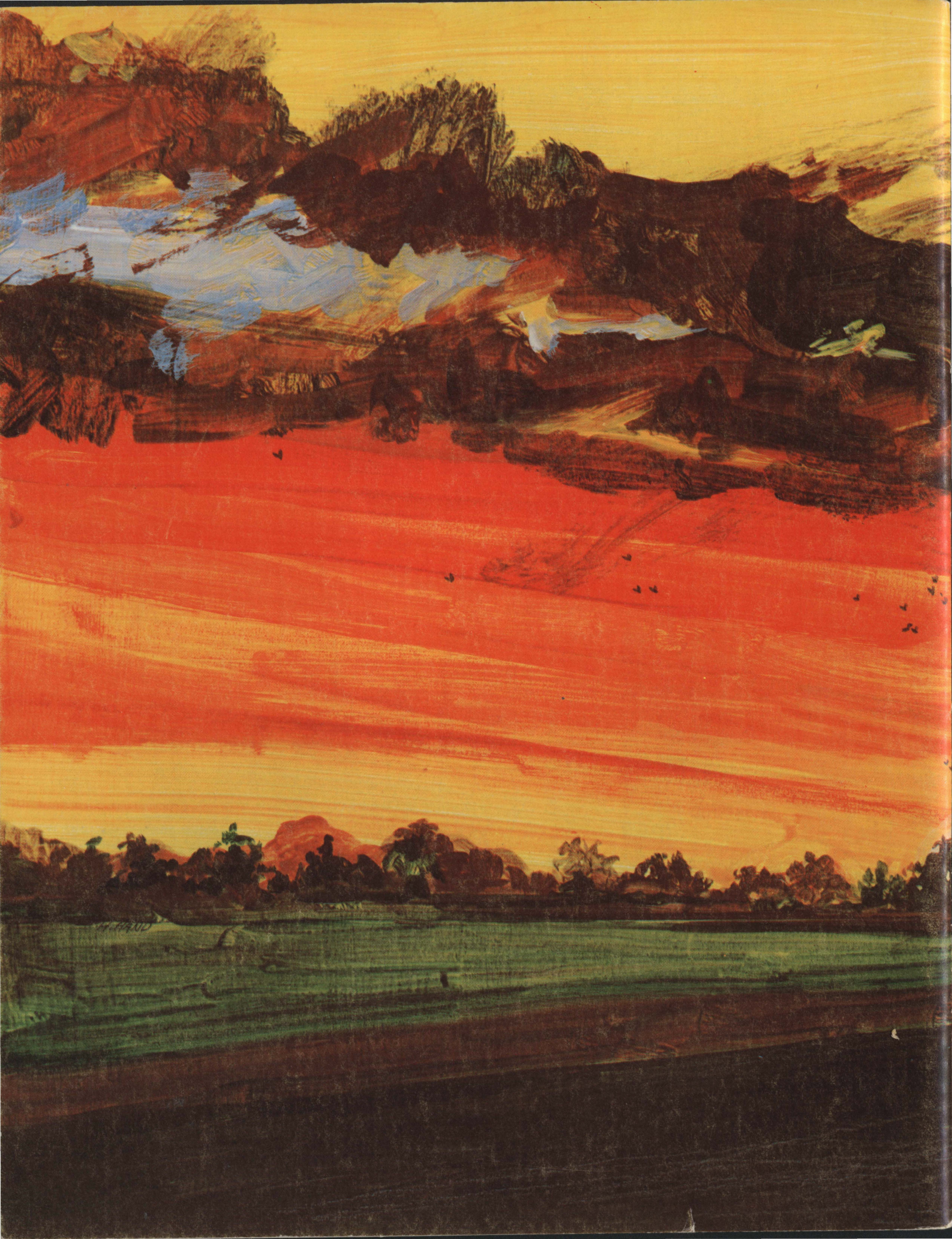


CREDITS

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IOWA AGRI-CULTURE SERVES THE WORLD



\$1.00