# **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



2748 4 4 TIDELY FARM TOPICS No. 54a

#### A TALL STORY ABOUT CORN

A transcribed report by Dr. Byron T. Shaw, Principal Agronomist, Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, and John Baker, Chief of Radio Service, U. S. Department of Agriculture. Recorded February 20, 1946. Time: 6 minutes and 18 seconds, without announcer's parts.

# ANNOUNCER'S OPENING AND CLOSING

## CPENING

## ANNOUNCER (LIVE):

Now for a tall story on corn...from a very reliable source--the scientists of the United States Department of Agriculture. The science story this time is about doubling and trebling the yield of corn in the South.

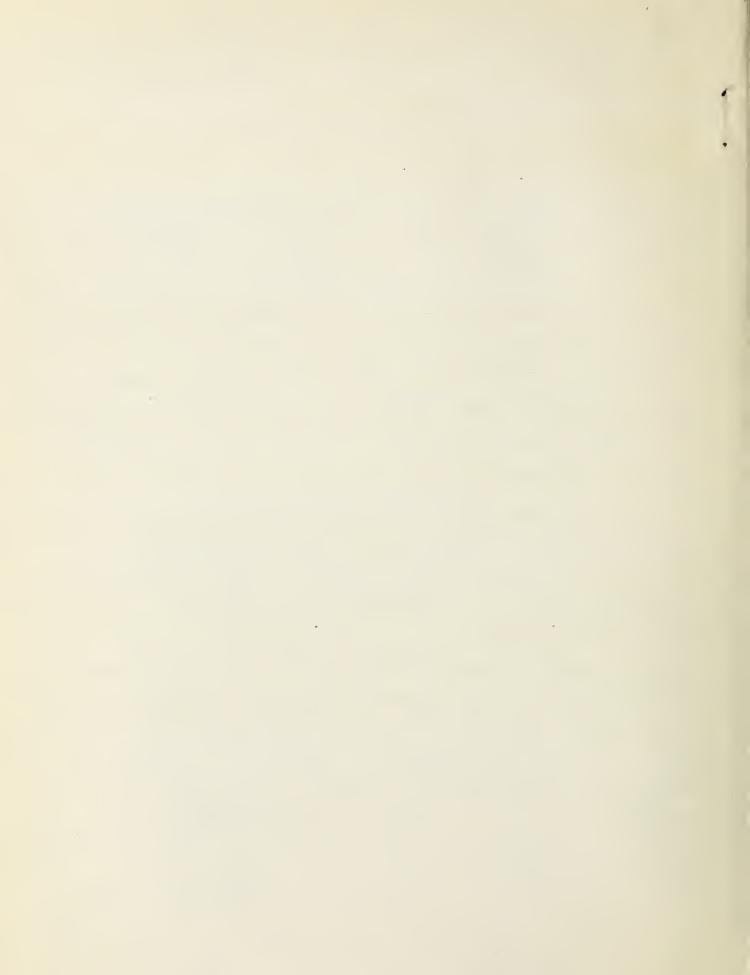
To find out how it was done and what the significance is, let's listen to this transcribed report by Dr. Byron T. Shaw, Agronomist of the Department of Agriculture. John Baker of the Department is ready to start things off...John...

#### CLOSING

## ANNOUNCER (LIVE):

Folks, that was Dr. Byron T. Shaw and John Baker of the U. S. Department of Agriculture, reporting on how science is helping Southern farmers use mineral nitrogen to grow more corn. What science has done with nitrogen in the South may help corn growers in this part of the country some day . . . who knows.





#### A TALL STORY ABOUT CORN

A transcribed report by Dr. Byron T. Shaw, Principal Agronomist, Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, and John Baker, Chief of Radio Service, U. S. Department of Agriculture. Recorded February 20, 1946. Time: 6 minutes, 18 seconds, without announcer's parts.

#### TRANSCRIPTION:

- BAKER: Dr. Shaw, you and I are here in the Nation's Capital, but this corn story actually started down in North Carolina...2 or 3 hundred miles south of Washington...
- SHAW: Yes...about two years ago. It began with an idea that bothered the research men at the North Carolina Agricultural Experiment Station... an idea that they could do something to help Tarheel farmers grow more corn to the acre. North Carolina corn yields only average around 20 bushels to the acre. The research men thought maybe they could work out a way to do better than that.
- BAKER: They did, all right...107 bushels of corn from one acre of land in North-Carolina. It's astounding, but they did it.
- SHAW: Don't forget they did it on an experimental plot. A farmer trying to do it on his place might not get such yields.
- BAKER: But the yields would still be way ahead of what they are now. They tell me North Carolina farmers are really steamed up over those corn experiments.
- SYAW: There's no doubt about that. They've held over 600 demonstrations that I know of to learn the new method . . .
- BAKER: And Dr. Baver, the head of the North Carolina Experiment Station, says flat-footedly that he's sure North Carolina can double the size of her corn crop in the next 10 years.
- SHAW: Dr. Baver believes that. And it sounds reasonable, in the light of the experiments they're made on different locations through the State.
- BAKER: Tell us something about those experiments. The trick is in fertilizer, isn't it?
- SHAW: Yes...fertilizer in the form of mineral nitrogen. And lots of fertilizer. Another very important "trick" is hybrid corn. They used hybrid seed corn developed right there in North Carolina to suit local needs. A third "trick" was in the way they cultivated the corn.
- BAKER: It was planted much thicker than North Carolina corn usually is...
- SHAW: That's right. Now, one plot got no extra nitrogen. The second plot got 20 pounds to the acre. The third, 40 pounds...and so on up to the last plot. That plot got 120 pounds of nitrogen. That's 725 pounds in terms of nitrate of soda, or about 370 pounds of aumonium nitrate.

#### A TALL STORY ABOUT CORN

A transcribed report by Dr. Byron T. Shaw, Principal Agronomist, Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, and John Baker, Chief of Radio Service, U. S. Department of Agriculture. Recorded February 20, 1946. Time: 6 minutes, 18 seconds, without announcer's parts.

-0-

#### TRANSCRIPTION:

BAKER: When it came harvest time, the more nitrogen a plot has received, the more corn it yielded?

SHAW: That's the way it worked out. The yields went up steadily with every additional 20 pounds of nitrogen.

BAKER: Can you recall the figures for the yields?

SHAW: I think I can--for the experiment in Hoke County, anyway. The yield on the plot that got no nitrogen was 19 bushels. On the plot with 40 pounds of nitrogen, the yield jumped to 45 bushels...

BAKER: If I'm keeping up with you, I think that figures out to an increase of something like half a bushel of corn to a pound of nitrogen...

SHAW: Roughly, something like that. When the nitrogen got up to 80 pounds, the yield went up to 85 bushels. The top yield was 107 bushels...and it took 120 pounds of nitrogen.

BAKER: No nitrogen, 19 bushels of corn; 120 pounds of nitrogen, 107 bushels of corn.

SHAW: In other words, an 88-bushel increase...almost unbelievable, isn't it?

BAKER: That's just what I said the first time I heard the story...107 bushels of corn to the acre in North Carolina! I just didn't believe it.

SHAW: And all for about \$12 worth of extra nitrogen applied when the young corn was about a foot high.

BAKER: I still can hardly believe it. Now, Dr. Shaw, that was the experiment in Hoke County. How did the ten experiments in the other parts of North Corolina pan out?

SHAW: Pretty much the same. That is, where the rainfall was good enough for comparison. Altogether, it was pretty clear proof that it will be very profitable to North Carolina farmers to add a lot of nitrogen to their corn land.

BAKER: The figures you gave us certainly sound that way. Now, will you tell us something about how the corn was planted?

#### A TALL STORY ABOUT CORN

A transcribed report by Dr. Byron T. Shaw, Principal Agronomist, Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, and John Baker, Chief of Radio Service, U. S. Department of Agriculture. Recorded February 20, 1946. Time: 6 minutes, 18 seconds, without announcer's parts.

Glad to . . . and that's very interesting. The usual way corn is SHAW: planted in North Carolina is in 5-foot rows with a stalk every 2 feet. It's cultivated four times to keep down weeds and crab grass. When Dr. Bert Krantz at the Experiment Station laid out the test plots, he was, of course, planning to use the hybrid seed we mentioned. So he put the rows 3 feet apart. And he left the corn plants 16 inches apart in the row. That's really planting it close. They ran a weeder or harrow over the field as the corn broke through the ground. Then they cultivated it only twice . . . very lightly. After the corn was 2 feet high, a cultivator never went in the field. The plants were so close together . . . and they grew so vigorously . . . that they smothered out the weeds and crab grass. It wasn't necessary to cultivate any more. Also, I should explain that where corn was planted on land that had been previously in tobacco, there was enough phosphorous and potassium already in the soil. Otherwise, phosphorous and potassium were added.

BAKER: When was the nitrogen applied?

SHAW: About 20 pounds at planting time, and the rest when the plants were about a foot high. They put it in rows on each side of the plants.

BAKER: Speaking of hybrid corn -- as we were a moment ago, one of the first things Corn Belt farmers learned about hybrid corn was that it didn't need as much cultivation as the old varieties.

SHAW: That's true. Many Midwest farmers only cultivate their corn now about half as much as they use to.

BAKER: Another thing . . . in the North Carolina experimental work, they found that with so much nitrogen, corn didn't "fire" or burn as much . . .

SHAV: Not if the soil had 60 pounds of nitrogen or more . . .

BAKER: Even in the hottest, driest weather?

SHAW: No, it didn't fire, even in hot weather.

BAKER: Anybody who has ever driven through brown, dry cornfields in the South can understand how important that point is. Now, we said the <u>farmers</u> in North Carolina are taking a keen interest in this new corn culture . . .

SHAW: Yes, indeed. As I said, hundreds of demonstrations have already been held to teach the "know-how" to farmers all through the State. The Extension Service helps to put on these demonstrations, and farmers come from miles around . . .

BAKER: So the North Carolina folks really meant it when they said they intend to double their corn yields in the next 10 years.

TIMELY FARM TOPICS No. 54a

# A TALL STORY ABOUT CORN

A transcribed report by Dr. Byron T. Shaw, Principal Agronomist, Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, and John Baker, Chief of Radio Service, U. S. Department of Agriculture. Recorded February 20, 1946. Time: 6 minutes, 18 seconds, without announcer's parts.

SHAW: It looks like it. They're set their goal . . . and they're going right out after it.

BAKER: They'll need plenty of nitrogen. I hope the supply holds out.

SHAW: There may be a brief period when it's a little hard to get, but for the most part I think there'll be enough

BAKER: We've only mentioned North Carolina, where this Southern corn revolution started, but don't you think it will probably scread to other States in the South?

SHAW: That's happened already. Agronomists from some of the Southern States heard about the Tarheel corn, and they've already started laying plans to try extra nitrogen on corn in their States.

BAKER: And maybe 10 or 15 years from now, it won't be just North Carolina that's doubled the size of a major crop . . . the entire South may have done it.

SHAW: Well . . . it's a little early to go that far yet, but I will say this--the chances look reasonably good.

## FARM LOANS FOR VETERANS

A transcribed discussion by Robert W. Hudgens, Associate Administrator, Farm Security Administration, and John Baker, Chief of the Radio Service, U. S. Department of Agriculture. Recorded February 25, 1946. Time, without announcer's parts, 7 minutes, 15 seconds.

## ANNOUNCER'S OPENING AND CLOSING

#### OPENING

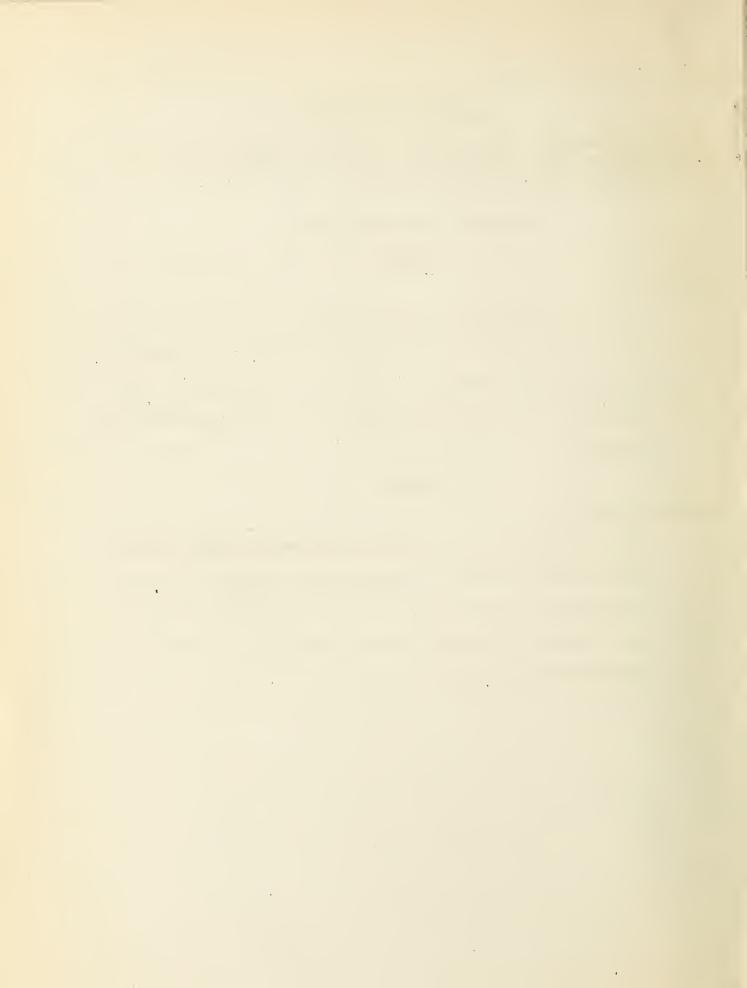
#### ANNOUNCER (LIVE)

Thousands and thousands of returned veterans are interested in farming. So, let's talk about one of the ways the Government is helping veterans who need financial assistance with farming. For this transcribed story, here's John Baker of the Department of Agriculture ready with a guest.

#### CLOSING

## ANNOUNCER (LIVE):

That was Robert W. Hudgens, Associate Farm Security Administrator, and John Baker, of the U. S. Department of Agriculture. If you're interested in a veteran's loan from the Farm Security Administration, go to the Farm Security office in your county . . . or see the county agricultural agent.



## FARM LOANS FOR VETERANS

A transcribed discussion by Robert W. Hudgens, Associate Administrator, Farm Security Administration, and John Baker, Chief of the Radio Service, U. S. Department of Agriculture. Recorded February 21, 1946. Time: 7 minutes, 15 seconds, without announcer's parts.

· 1444

#### TRANSCRIPTION:

BAKER: Here in Washington...our guest is Robert W. Hudgens, Associate Farm Security Administrator. Mr. Hudgens, Farm Security makes two major types of loans to veterans for farming purposes---loans to use in operating a farm and loans to buy farms...

HUDGENS: That's right. We call one type an "operating loan" and the other a "purchase loan".

BAKER: . How much money has the FSA loaned to veterans so far?

HUDGENS: More than 15 million dollars. The bigger share of that money was for loans of the first type---operating loans. And right in the beginning I want to say that's last-resort credit...

BAKER: Last-resort credit---you mean you lend the veteran money to operate a farm if he can't get it anywhere else?

HUDGENS: If he can't get it anywhere else at a reasonable rate. Usually, the reason he's been refused by private lending agencies is he doesn't have the kind of security they require.

B.KER: But FSA wants to help such cases, so you've worked out other ways to safeguard the loan?

HUDGENS: Yes...I'll explain those ways as we go along...

BAKER: All right, Mr. Hudgens. Let's imagine I'm John Baker, a veteran who wants to get back into farming...and I want an operating loan.

HUDGENS: You are a veteran...

BAKER: That's true...but the point here is that I'm a votered Interested in farming. I know where I can lease some farm land, but I haven't got the money to get the seed and fertilizer and livestock I'd like to have. None of the other veterans' loans cover my case, and I haven't been able to get a loan from a private source. Somebody's told me I might have a chance with Farm Socurity. And that's where I stand right now. All right...what's my next move?

HUDGENS: Where do you live, Mr. Baker?

BAKER: Fairfax County, Virginia...

TIMELY FARM TOPICS No. 54b

## FARM LOANS FOR VETERANS

A transcribed discussion by Robert W. Hudgens, Associate Administrator, Farm Security Administration, and John Baker, Chief of the Radio Service, U. S. Department of Administration. Recorded February 25, 1946. Time, without announcer's parts, 7 minutes, 15 seconds.

HUDGENS: Then your next move is to get in touch with the Farm Security Office

in Fairfax County.

BAKER: I don't believe I know where the Farm Security Office is...

HUDGENS: Do you know where to find the county agricultural agent?

BAKER: Yes...he's at the courthouse...in the town of Fairfax.

HUDGENS: Well, start with the county agricultural agent. He'll tell you where

to find the Farm Security representative.

BAKER: All right. I locate the Farm Security man and go to see him. Then

what happens?

HUDGENS: He'll ask you some questions about where you've tried to get a loan,

what sort of a farm plan you have in mind, what experience you've had with farming and what makes you think you can do a reasonably good job of it. If you get past those hurdles, then he'll probably pull an application blank out of his desk and help you fill it in

right then and there.

BAKER: Are those application forms very long and detailed?

HUDGENS: They don't require any more information than the average credit

agency requires.

BAKER: Then I suppose somebody will have to call a meeting and pass on the

application...that's usually what happens to applications.

HUDGENS: Well, it seems to be the most businesslike way to handle such matters.

We have a local committee that does it...it's called the Farm

we have a local committee that does locally bearing one laim

Security committee.

BAKER: Who's on this local committee?

HUDGENS: Three local farmers...in your case out in Fairfax County, it would

be three Fairfax County farmers...men who know farming in that

section and who've proved it by making a living themselves.

BAKER: They'll meet and consider my application, and if they think I'm a

fair risk, they'll approve it. If not, they'll reject it. Now,

how will they decide which to do?

## FARM LOAN FOR VETERANS

A transcribed discussion by Robert W. Hudgens, Associate Administrator, Farm Security Administration, and John Baker, Chief of the Radio Service, U. S. Department of Agriculture. Recorded February 25, 1946. Time, without announcer's parts, 7 minutes, 15 seconds.

HUDGENS: I hinted at that a minute ago. The first thing is, they'd have to satisfy themselves you hadn't been able to get a farm loan from any private source at reasonable rates. The next point is, have you had any experience at the kind of farming you want to do?

BAKER: For me, that would be general farming...

HUDGENS: All right. The Committee would want some evidence that you know enough about general farming to have a fair chance to succeed.

BAKER: That sounds reasonable...

HUDGENS: Another point they'd want to look into would be land. If you already own or rent farm land, is it good enough land to make a fair living on.

BAKER: Well, if a man's land is poor, he certainly starts out with a big handicap.

HUDGENS: That's right...and it may be that the Committee can help fix up that difficulty. They may be able to help locate some land where you'll have a better chance to make a living...

BAKER: The Committee goes as far as that?

HUDGENS: Yes, indeed. The Committee gives a veteran all the advice it can.
That's the whole idea--to help the veteran get re-established...
but re-established on a reasonably good foundation.

BAKER: It's hard to get disinterested advice sometimes...maybe this is one way to do it.

HUDGENS: We've found that it works out pretty well. The Committee tries very hard to look out for the best interests of the veteran...and at the same time safeguard the money it's lending....the taxpayers' money.

BAKER: If you've found that it works...results are what count. Now, have we covered all the points the Committee will take up when it goes over my application for a farm loan?

HUDGENS: No. There's one more point...and it's very important. You and your wife must agree to follow a farm-and-home management plan that the FSA supervisors in your county will help you work out.

TIMELY FARM TOPICS No. 54b

## FARM LOANS FOR VETERANS

A transcribed discussion by Robert W. Hudgens, Associate Administrator, Farm Security Administration, and John Baker, Chief of the Radio Service, U. S. Department of Agriculture. Recorded February 25, 1946. Time, without announcer's parts, 7 minutes, 15 seconds.

BAKER: These FSA supervisors just help us work out farm and home management plan of our own...they don't tell us how to run to place...

HUDCENS: No...they discuss and advise on ways and means that will help you.

Actually the plan is not very different from a farmer getting advice about crops to plant from his county agent—or his wife getting help with her meal-planning from the Home Demonstration agent. But, of course, if you agree to follow the plan, you're obligated to do it.

A sound plan is really the assurance that you'll pay back your loan...

BAKER: I see. Now, does the local Farm Security Committee have the final say about my application...or does it have to go to Washington to be approved.

HUDGENS: No...it doesn't have to go to Washington. A district or regional official of Farm Security reviews it...that's all.

BAKER: What's the limit on an FSA loan?

HUDGENS: If it's an operating loan, the amount is usually around \$1500... though it can be as much as \$2500. If it's a purchase loan, it's more, of course. In a few cases, up to \$12,000.

BAKER: How long can a loan run?

HUDGENS: That depends on what sort of arrangement you have. Roughly, around 5 years for an operation loan---with interest at 5 per cent. A purchase loan---a loan to buy farm land---might run to 40 years with 3 percent interest. If you can pay it up sooner, fine.

BAKER: ... Is a purchase loan limited to those who have had farm experience and are not able to get credit from the usual sources

HUDGENS: No. For a purchase loan a veteran only needs to show that he needs help in making and carrying out a farm-management plan.

BAKER: You said veterans have already borrowed more than 15 million dollars from Form Security...so a good many veterans have actually already gotten a start through FSA?

HUDGENS: Yes, we've already helped nearly 8500 veterans...though we're just getting to the peak of the applications. Last summer, for instance, we were only getting 10 or 12 hundred applications a month from veterans. Now, we're getting them at the rate of 5 or 6 thousand a month.

TIMELY FARM TOPICS No. 54b

## FARM LOANS FOR VETERANS

A transcribed discussion by Robert W. Hudgens, Associate Administrator, Farm Security Administration, and John Baker, Chief of the Radio Service, U. S. Department of Agriculture. Recorded February 25, 1946. Time, without announcer's parts, 7 minutes, 15 seconds.

BAKER:

To sum up, if a veteran has a reasonable farm proposition, can find a suitable farm to buy or rent, if he's had some experience at farming, if he's willing to work hard and follow the management plan he and the Farm Security supervisor make out together...if he measures up all right on these points, his chances of an FSA loan should be fair.

HUDGENS:

Better than fair...I think I'd say his chances are good. We'll provide the loans and services just as long as we have the funds and authority to do it.

# # #

