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F O R T U N E S W A S H E D A W A Y

"EDMUND RUFFIN --
FATHER OF SOIL CHEMISTRY"

Broadcast No. 52 in a series of
discussions of soil conservation

WLW, Cincinnati

April 22, 1939 6:45-7:00 p.m.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
Dayton, Ohio

SOUND: Thunder and rain...

ALLISON

Fortunes Washed Away!

ORGAN: I GET THE BLUES WHEN IT RAINS...fading....

ALLISON

Nearly eighty years ago, the first gray of an April morning silhouetted Fort Sumter against the eastern sky. Night still darkened the waters of the bay. An old man of 67 years stood, his long white locks hanging down upon the shoulders of a homespun coat. A signal gun flashed from the mortar battery at Fort Johnson on the southern shore. Then....

SOUND: Boom of cannon.

ORGAN: Up and rising, martial music behind following...

ALLISON

Fort Sumter had been fired upon! With pallid face, with tear-dimmed gray eyes, an old man, oldest of his regiment, old in the service of his country in peace and in war, had pulled the lanyard which loosed the storm upon Fort Sumter!

ORGAN: Up and out.

ALLISON

The old man's name was Edmund Ruffin. Fifth in America to bear that name, Edmund Ruffin is known to but few as the man who fired the first shot upon Fort Sumter. Even today, few know of him as a prominent agriculturist. But a monument to Edmund Ruffin remains behind...not a monument of marble nor of brass, not of concrete nor of steel. It is the soil of this country..for Edmund Ruffin can truly be called, the father of soil chemistry in America.

ORGAN: CARRY ME BACK TO OLD VIRGINNY.

ALLISON

When Edmund Ruffin, just turned nineteen, took over the responsibilities of a planter on weary lands, the situation represented the accumulations of two centuries of improper tillage methods. Plows and plowing were poor. Farmers cut shallow furrows up and down hillsides. With his young bride, Susan.....

RUFFIN

...so you can see what we're up against, Susan. My family has farmed this place for many generations. I don't think they've used it kindly.

SUSAN

It's no worse than those around us, Edmund.

RUFFIN

True. The Virginians have been easy and negligent husbandmen. New land is taken up, tobacco is grown on it for three or four years, then Indian corn as long as any will come.

SUSAN

And then, when the soil is worn out, they begin again with a new piece. When that's gone, they move west.

RUFFIN

But I won't! I tell you, I won't leave these paternal acres. This is our home. But even so, we're living in a world of widening fields and retreating forests. Acres growing weary, falling from cultivation, and returning again to forests.

SUSAN

And the very condition of the land is reflected in the people. Have you noted how many planters are fraying a bit at the cuffs, out at the elbows, down at the heels....

RUFFIN

And then grow bitter and complain of returns that won't pay the cost of production. But here, Susan! We're growing morbid. We're young, we have strength....

SUSAN

And we have each other.

RUFFIN

Yes, each other. And we have our land. We'll find a way to build up these weary acres! Still.....(fade)

SOUND: Banjo plunking faintly in background.

HAMMOND (fading in)

....so I thought I would drop over and see you tonight, Edmund.

RUFFIN

I'm glad you did, my good friend James Hammond. Here, Jem Sykes! Fetch Mr. Hammond a cold drink....and bring one for me, too.

SYKES

Yessuh, Massa Ruffin.

RUFFIN

You can see that the prospects for a young planter are indeed gloomy. The land is growing tattered and full of briars, and no one seems to know what to do about it.

HAMMOND

We must do something...or move west. I've noticed how the planters are acting, too. They plod on, but their persistence is too mechanical to be born of courage. Edmund, agriculture is yielding ground.

RUFFIN

I've moved from experiment to experiment. Crop rotations don't bear fruit any more, because clover and the other legumes just won't grow on poor lands. And there ought to be some way to make them grow.

HAMMOND

I can remember, Edmund, when your lands here at Coggin's Point were the best in Prince George county.

RUFFIN

I'm not as optimistic as I was when I took over the home place five years ago. The larger part of the land doesn't average more than ten bushels of corn to the acre, and no more than six bushels of wheat..on the better part, too.

HAMMOND

Yes, I know. You were an optimistic lad when you took over the reins. The enthusiasm of youth, and the reading you did! I guess you'd been reading about agriculture ever since you were a boy!

RUFFIN

Indeed I had. And I've done a lot of experimenting, but failure just dogs my steps. I drained my better swamp lands, and what happened? After three years, the land became so poor I had to abandon it. Clover won't grow and when you plow hilly lands into ridges, the soil washes completely away. But I'm still trying.

HAMMOND

I hope you'll never quit trying, Edmund. I'd like to see a few of the old planters around here change their saucy tune. They've about concluded that the land in this part of Virginia simply can't be enriched.

RUFFIN

Yes, they smiled in, shall we say tolerance...at all of my experiments. But now they're beginning to say "I told you so". I'm about ready to admit that I've failed. But, James, I can't admit it. There must be some way!

SYKES (fading in)

Here you are, Massa Ruffin. And a nice tall one for Massa Hammond.

HAMMOND

Fine, Jem, fine!

SOUND: Clinking of glasses.

RUFFIN

To you, James.

HAMMOND

And to your experiments, Edmund.

SOUND: Pause as they drink.

RUFFIN

The habit of the planter seems to be chop, crop, and get out. I'll say it again, James, there must be some way to build up this land!

ORGAN: CARRY ME BACK TO OLD VIRGINNY.

ALLISON

An angel of desolation had cursed the land. Down the slopes, escaping raindrops, laden with grit, ripped out nasty-looking gullies, down to bedrock. Farm after farm wore out, washed and gullied, dreary and uncultivated. Whole sections of Virginia presented a panorama of barren and exhausted soil, half-clothed negroes, lean and hungry stock, houses falling in decay, fences wind shaken and dilapidated. But Edmund Ruffin kept working, kept experimenting. He refused to admit that...he had failed.

SUSAN

Edmund, is it true what I heard you tell Jem Sykes today... about the condition of the farm, I mean?

RUFFIN

Eh! Oh, what's that?

SUSAN

Did I hear you say that no part of the land is more productive than it was when we came here?

RUFFIN

Yes, it is true, Susan. And on much of it, a tenfold increase has been made in the galled and gullied hillsides and slopes. We might as well face facts.

SUSAN

Then you've definitely made up your mind to migrate west?

RUFFIN

I hate to admit it. I was just reading this copy of Davy's "Agricultural Chemistry"...thought I might find out something about the soil itself.

SUSAN

You go right ahead with your reading. I have faith in you, anyhow.

RUFFIN

I don't suppose I'll find out much here. It's just about..... here! Now what's this?

SUSAN

Yes?

RUFFIN

Listen to this....."sterile soils containing the salt of iron, or any acid matter, may be improved by the application of quicklime." Listen, Susan, that gives me an idea.

SUSAN

I don't follow you.

RUFFIN

I've noticed that sorrel and pine abound on poor lands. Maybe vegetable acids are to blame for our sterile soils. Now, if that's true....

SUSAN

....you'll put quicklime on the sterile soils!

RUFFIN

Not exactly that. But this neighborhood abounds in common fossil shells. My studies about chemistry have taught me that these fossil shells are mostly made up of marl, which is a form of lime. I'm going to leave authorities behind and seek my own proofs!

SOUND: Cart creaking slightly, harness rattling, as men scoop up marl. Occasional negro voices.

SYKES

Massa Ruffin, you sho done got the boys thinking you're crazy, scooping up these heah fossils!

RUFFIN (eagerly, and good naturedly)

I don't doubt it, Jem. But something tells me that at last I'm on the right track.

SYKES

I sho hope so, Massa. I don't like the way some of the folks been laffin' at you. No suh!

RUFFIN

Let them laugh, Jem, let them laugh. You've stuck by me.

SYKES

You treat us slaves right, that's why. And all the boys think you is a good massa.

RUFFIN

I'm glad someone thinks so. Now let's see, Jem. I want to get about 200 bushels out of this pit, and we'll spread it over a few acres of that poor ridge land.

SYKES

You cain't get nothin' to grow up there! Why, rocks won't even grow on that ridge.

RUFFIN

Just the same, we're going to give it a chance. In the spring, I'm going to plant the entire ridge to corn as a testing crop. We'll show them yet, Jem!

ORGAN: SIDE BY SIDE.

ALLISON

Eagerly Edmund Ruffin awaited the result of his latest experiment. As the season advanced, he found reason for joy. From the very start, the plants on marled ground showed marked superiority, and at harvest time they yielded an advantage of fully forty percent. The carts went back to the pits. Fields took on new life. A new era in the agricultural history of the region had dawned. Edmund Ruffin would save the Old South!

SUSAN (fading in)

...and read this, Edmund!

RUFFIN

You read it to me, Susan. I'm afraid I'm a little too excited to read it clearly.

SUSAN

This editor says it is...."the first systematic attempt, wherein a plain, practical, unpretending farmer has undertaken to examine the real composition of the soils which he possesses and has to cultivate." And he encloses a note saying that he is going to print an extra edition of this issue and send it, free, to farmers all over the country. Oh, I'm so proud!

RUFFIN

I am too, Susan, not so much of what I've done, but because I believe at last we've found a way to build up these sterile soils. Now we'll get clovers to grow!

SUSAN

And to think, one man has called your essay on liming and marling "the most thorough piece of work on a special agricultural subject ever published in the English language."

RUFFIN

Oh, they're exaggerating!

SUSAN

Well, President John Tyler wasn't exaggerating when he hung your picture over his mantel, alongside of that of Daniel Webster! The greatest American agriculturist!

ORGAN: SIDE BY SIDE.

ALLISON

There was something both pathetic and inspiring about this youth, amid the jeers of his neighbors, patiently acquiring scientific books, painfully building his apparatus, carefully running his tests over and over again. But the way was not clear. Like all pioneers, Ruffin found his teachings, although acclaimed by leaders, ignored in general practice. Every new move was whispered from farmer to farmer, to be laughed over when two or three were gathered together. Men referred to the pit from which came the first shells as "Ruffin's Folly." But Edmund Ruffin continued his experiments, served in the Virginia legislature, became president of the Virginia Agricultural society.....

SOUND: Door opens and closes.

HAMMOND (fading in)

Well, how's the great man today?

RUFFIN

Enough of your jests, James. Come in and have a seat.

HAMMOND

I will that. Still working on your soil tests?

RUFFIN

Yes, I'm finding out considerable about the composition of soils.

HAMMOND

Good. You know, Edmund, this period from 1820 to 1845 has been a notable one in the development of the Old South. How well I remember when it opened....despair and land abandonment were in full sway.

RUFFIN

Yes, I remember visiting Mount Vernon. You know how Washington struggled for better methods. Yet you can't imagine a more widespread and perfect agricultural ruin. Jefferson closed his days at Monticello in poverty..his fields and markets had failed him.

HAMMOND

And agricultural societies dwindled for lack of support. Farmers lost heart....then came the use of marl, and the country has you to thank for it.

RUFFIN

Where marl is introduced, we don't hear any more about turning out land or emigrating to the West. Farmers around here who left poverty stricken fields have returned to find luxuriant corn taking the place of "hen's grass."¹

HAMMOND

I have just returned from South Carolina. A few years ago they were laughing at you.

RUFFIN

And many of them still are. "Ruffin's Folly," I hear time and time again.

HAMMOND

That attitude is changing, Edmund. In South Carolina, the universal feeling towards you is one of the highest respect in every way. I congratulate you as one of the few benefactors of mankind whose services has been appreciated while you are still living.

RUFFIN

I am glad, James. And I was glad to see my neighbor Carter Braxton spread marl over more than 800 acres. He's preparing for clover.

HAMMOND

And he was one of those who laughed at you. Marling will put a new face on many of these fields. Edmund Ruffin, you are a great man.

ORGAN: KING FOR A DAY.

ALLISON

Then...came....war!!! After his symbolic shot at Fort Sumter, Edmund Ruffin, an old, old man, retired from action. Invading armies destroyed his home, Marlbourne, broke the windows, tore up the fences, burned the trees, dammed the drainage ditches. In 1864.....

SERVANT

The guests are preparing to leave, Massa Ruffin. You must try to get some rest.

RUFFIN

Rest? Oh, yes....but how can I rest? My poor daughter, Mildred, dead...in far off Kentucky. Mildred....

SOUND: Gentle knock on door.

SERVANT

I'll see who it is. Please try to rest.

SOUND: Door opens. Whispers. Door closes.

SERVANT (hoarsely)

Massa Ruffin.

RUFFIN

Yes?

SERVANT

Massa Ruffin, there's something you must know.

RUFFIN

Yes, yes, out with it. My cup of grief is already full. It can't run over.

SERVANT

Your son, Julian...

RUFFIN

Julian?

SERVANT

Massa Julian has been killed in battle.

RUFFIN

Julian? Oh. Please leave me.

SERVANT

Yessuh.

SOUND: Door opens and closes.

SOUND: Ruffin sobbing.

ORGAN: Funeral march, softly, softly, softly rising..

ALLISON (gently)

A few words penned in his diary. The ink had scarcely dried.

The sound of the carriage on the road died in the distance.

SOUND: Revolver shot.

ALLISON

The weary old soldier had gone home.

SOUND: Taps, played on bugle, thru to end.

ALLISON

Thus passed Edmund Ruffin, an old, old soldier who gave the science of soil chemistry to America. Christopher Columbus wrote of America, "Always the land was of the same beauty. The fields were green and full of fruits as red as scarlet, and everywhere there was the perfume of flowers, and the singing of birds, very sweet." They laughed at Edmund Ruffin, but the soil he saved through patient years of experiments, is his monument. Today, modern soil conservation methods everywhere depend upon the principles first applied in America by Edmund Ruffin.

ORGAN: SIDE BY SIDE

ALLISON

With this broadcast, "Fortunes Washed Away" ends its first year on the air. On behalf of the Soil Conservation Service of the United States Department of Agriculture, and speaking for WLW, we wish to express our sincere appreciation for the kind manner in which you have received this series. The first year is over. Do you want Fortunes Washed Away to continue? If you do, please drop a letter or a penny postcard to Soil Conservation, Dayton, Ohio, and let us know about it. And if you would like a copy of the bulletin, "Soil Defense", write to the same address, Soil Conservation, Dayton, Ohio. Next week, Tennessee's strawberry festival!

SOUND: Thunder and rain....

ALLISON

Fortunes Washed Away is a studio presentation of the agriculture department of the Nation's Station.

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