ECONOMIC EFFECTS ON INVASIVE WEEDS ON LAND VALUES
(from an Agricultural Banker's Standpoint)

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The year was 1954, four young 4-H members were traveling to a livestock judging workout. Ben Barrett, the county agent, stopped the car and escorted the young men to a weed patch located on the adjacent railroad right-of-way. **"Take a good look—this is leafy spurge. If you ever see it in your area, let me know. It is almost impossible to control."**

My next encounter with leafy spurge came in the spring of 1963. As Assistant Ward County Extension Agent, I became aware of leafy spurge infestation in Ward County. There were an estimated 2,000 acres in a seven-township area centering on the "Brooks Ranch" area. It was found in patches from 200 square feet to 10 acres in size. These patches were in road ditches, coulee bottoms, and fence lines.

The county agent and myself used square rod demonstration plots and personal contacts to try and convince landowners to organize a control program. We had very little success.

The excuses were many:

1. It's too expensive; the state should pay the bill;

2. It came in along the railroad; they should clean it up;

23. What's the problem—it's been here since the mid 30's and hasn't spread very fast.

A few individuals started control programs on their land, and those areas are relatively clean today.

By 1972 (10 years later), the acreage infested in Ward County had doubled to around 4,000 acres. There was now some spurge in all 57 townships in the county. The concern level of the landowners had increased, and the county began a limited control program along county roads, but control on private land was limited due to the high cost per acre of chemical control.

By 1982 (10 years later), the acreage doubled again to around 8,000 acres. The county commissioners were considering scrapping the control on roadsides; they had not seen very much done on the private land, and wondered why they were spending money on road ditches if the adjacent landowners didn't do anything. At the same time, the state legislators changed the weed laws, allowing counties to levy 3 mills of property tax to be used for weed control. In addition, the Legislature appropriated state funds which were divided among the counties which levied the 3

mills. The combination of county and state funds could be used to cost share spurge control on private lands.

This cost share approach on private lands was instituted in 1983. In my county and state, funds cover 70% of the cost. The landowner pays apprximately 30%.

The acreage of leafy spurge continued to increase to a high of around 12,000 acres in 1990.

After watching control results from1983 to 1990, more and more farm operators took part. Estimated acreage infested in 1994 showed a drop to around 10,000 acres of which 8,000 had control measures applied.

Over the time frame of 1962 to 1992, the area of leafy spurge in North Dakota doubled every 10 years from 200,000 acres in 1962 to an estimated high of 1,000,000 acres in 1992.

In 1994, Agricultural Economists at North Dakota completed studies of the annual economic impacts of leafy spurge on grazing lands and wildlands in the four state area (North Dakota, South Dakota, Montana, and Wyoming).

The methods and detail of the studies are available from North Dakota State University (NDSU). In the interest of brevity, please allow me to summarize their findings for North Dakota.

Annual Grazing Land Impact in North Dakota

Grazing Acres	1,426,000
Infested Acres	625,900
% Infested	5.48%
Lost AUM's of Grazing	459,000
Value lost AUM's	6,876,000
Lost expenses & returns	17,317,000
Direct economic impacts	24,193,000
Secondary (economic impacts)	53,989,000
Combined economic impact	78,182,000

Annual Wildland Impacts in North Dakota

Wildland acres	4,899,000
Infested acres	350,300
% Infested	7.15%
Reduction Soil Water Conservation	514,100
Reduction Wildlife Recreation	2,111,600
Direct Economic Impact	2,625,700
Secondary Economic Impact	5,291,000
Total Economic Impact	9,790,000

Annual Impact on Grazing		$78,182,000
Annual Impact on Wildlands		9,790,000
	TOTAL:	**$87,972,000**

Take this annual loss over 10 years and the resulting combined loss is staggering!

Now, let's look at the effects of this weed on land values.

The basic value of any income producing investment is based on the projected income flow the investment will produce. This holds true for stocks, bonds, land, apartment buildings, etc.

If the income stream shrinks, so does the value (price) of the investment. Likewise, if income streams increase, so does the value of the investment.

Alien plants which invade native grazing lands, all affect carrying capacity negatively. They crowd out productive and usable forage plants lowering carrying capacity. As carrying capacity shrinks, so does the income stream. As income streams shrink, so does value of the asset.

Remember the Brooks Ranch? Leafy spurge acreage increased to the point where over 50% of the acres were infested. The owners decided to sell. Two brothers who were neighbors purchased the ranch in 1975, at full market value. Farm Credit Services financed the purchase. Within three years, they had deeded back most of the pasture land to Farm Credit Services and were financially distressed.

It took Farm Credit Services until early 1991 to sell the property. I visited with Jeff Haugen, the appraiser for FCS regarding prices and value. He said his knowledge of sales indicated that this type of pasture should have sold for $100 to $125 per acre. Because of the lowered carrying capacity due to leafy spurge, the price dropped to $40/acre. Jeff, also related that he was surprised it was that high. By the time it was sold, much of the pasture was 100% covered by spurge.

This drop in value of 60% is a real loss in value.

Another documented case came from Klamath County, Oregon. In the year 1988, a 1,360 acre ranch was taken over by the county to cover unpaid taxes caused by unproductivity because of leafy spurge. Estimated value for similar clean land was $125 to $150/acre. ($170,000 to $204,000).

The county put the ranch up for sale with minimum bids set at $17,000 for taxes due. The first try at selling failed with bids below that level. Eventually, it was sold to a party who lives in California for $27,500, with the stipulation he had to control the spurge. In 1995, I called Francis Roberts, the county weed supervisor in Klamath County, to confirm the information. He indicated he had confirmed the prices with county officials and had called the current owner. The owner had spent close to $60,000 through 1994 (6 years) on control measures. The weed supervisor indicated he has

a serious problem and has made little headway in control. This drop in value from $170,000 to $27,500 shows a loss of approximately 83% in value on this ranch.

As an agricultural lender, I am interested in the longterm values of my collateral. Most agricultural loans run for terms of over 10 years up to 20 to 30 years. If my collateral value declines due to invasive alien weeds, my loan may be in jeopardy. Likewise, reduced income due to alien invasive weeds lowers income from the land. This lower income will affect the borrower's ability to repay the loan.

Because of these effects on value and income, I am not interested in real estate loans where my collateral has invasive alien weeds.

All invasive weeds cause loss of native plants and changes in wildlife habitat. Losses of desirable habitat translates to losses of wildlife numbers. A case in point is the loss of elk habitat in Montana due to infestation of spotted knap weed. Another is wetland degradation due to purple loosestrife.

In some areas, noxious invasive weeds are an out-and-out eyesore. They cheat us of the surroundings we once found a pleasure to behold.

An unqualified impact of aliens and invasive weeds on less intensively managed wildlands is their potential to act as a nusery or seed bank from which to spread.

The bottom line is a devastating loss in incomes, land values, wildlife habitat, and the aesthetic value of wild places.

Our natural resource heritage depends on everyone's involvement.

You, as land managers, cannot stand by and let alien weeds continue to expand their range because it is "too" expensive to control them.

The highest cost you will ever pay is the lost income and drop in value as the alien plants take over.

The lowest cost is for early and continued control at first appearance. That first $1 spent on small patchs will save income, land values, and the extremely high costs of control later!

There is an old Indian proverb. "We don't inherit the land from our ancestors, we borrow it from our children."

LITERATURE CITED

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