

Effect of Increasing Energy Prices on Farming Costs

Question. Diesel prices have increased about \$0.40 per gallon in recent months. What effect will this have on production costs?

Answer. To answer this question, one needs fuel consumption estimates for field operations. If you keep fuel use records for field operations you can easily compute the expected impact of an increase in fuel price. Most folks don't track fuel consumption by enterprise and need to refer to a research-based fuel use estimate to compute the effect a rise in price will have on overall production costs. A good reference for fuel use estimates is the *Minnesota Farm Machinery Economic Cost Estimates for 2003*. Using the fuel consumption estimates presented in the Minnesota publication, the fuel consumption per hour for power units is presented in Table 1 and the fuel consumption per acre for field operations is presented in Table 2.

Note: The fuel use per acre is independent of the width of

Table 1. Increased fuel cost per hour for a \$0.40 increase in diesel price.¹

Power Unit	Estimated fuel, gal/hr	Cost/hr @ \$0.90 /gal	Cost/hr @ \$1.30 /gal	Increased fuel cost, \$/hr
Tractors				
40 HP	1.8	\$1.62	\$2.34	\$0.72
60 HP	2.6	\$2.34	\$3.38	\$1.04
75 HP	3.3	\$2.97	\$4.29	\$1.32
105 HP MFWD	4.6	\$4.14	\$5.98	\$1.84
130 HP MFWD	5.7	\$5.13	\$7.41	\$2.28
160 HP MFWD	7.0	\$6.30	\$9.10	\$2.80
200 HP MFWD	8.8	\$7.92	\$11.44	\$3.52
225 HP MFWD	9.9	\$8.91	\$12.87	\$3.96
260 HP 4WD	11.4	\$10.26	\$14.82	\$4.56
310 HP 4WD	13.6	\$12.24	\$17.68	\$5.44
360 HP 4WD	15.8	\$14.22	\$20.54	\$6.32
425 HP 4WD	18.7	\$16.83	\$24.31	\$7.48
Combines				
190 HP	8.4	\$7.56	\$10.92	\$3.36
220 HP	9.7	\$8.73	\$12.61	\$3.88
275 HP	12.1	\$10.89	\$15.73	\$4.84

the implement being used. If one compared two disks for example, one with a 20 foot width and one with a 30 foot width, the 30 foot disk would require a tractor with 50 percent more

horsepower to pull it, but since one would be covering 50 percent more acres per pass, the fuel use per acre would be the same for either scenario. (TD)

Table 2. Increased fuel cost per acre for a \$0.40 per gallon increase in diesel price.¹

Field Operation	Estimated fuel, gal/acre	Cost/acre @ \$0.90 /gal	Cost/acre @ \$1.30 /gal	Increased fuel cost \$/acre
Tillage				
Field Cultivator	0.33	\$0.30	\$0.43	\$0.13
Tandem Disk	0.47	\$0.42	\$0.61	\$0.19
Tandem Disk (HD)	0.76	\$0.68	\$0.99	\$0.30
Planting Equipment				
Row Crop Planter	0.34	\$0.31	\$0.44	\$0.14
Minimum Till Planter	0.53	\$0.48	\$0.69	\$0.21
Grain Drill	0.49	\$0.44	\$0.64	\$0.20
Presswheel Drill	0.63	\$0.57	\$0.82	\$0.25
No-till Drill	0.81	\$0.73	\$1.05	\$0.32
Crop Maintenance Equipment				
Cultivator	0.46	\$0.41	\$0.60	\$0.18
Rotary Hoe	0.18	\$0.16	\$0.23	\$0.07
Boom Sprayer	0.11	\$0.10	\$0.14	\$0.04
Anhydrous Applicator	0.55	\$0.50	\$0.72	\$0.22
Stalk Shredder	0.74	\$0.67	\$0.96	\$0.30
Harvesting Equipment				
Mower conditioner	0.40	\$0.36	\$0.52	\$0.16
Hay Swather	0.35	\$0.32	\$0.46	\$0.14
Hay Baler PTO (twine)	0.40	\$0.36	\$0.52	\$0.16
Round Baler (1500lb)	0.77	\$0.69	\$1.00	\$0.31
Combine (various heads)	2.00	\$1.80	\$2.60	\$0.80

¹ Fuel consumption information in tables 1 and 2 taken from *Minnesota Farm Machinery Economic Cost Estimates for 2003 FO-6696*, by William Lazarus, University of MN and Roger Selley, University of Nebraska. <http://www.apcc.unl.edu/faculty/wlazarus/MF2003.PDF>

Pesticide Container Recycling

The Nebraska Pesticide Container Recycling program provides a recycling opportunity for plastic from 1- and 2.5-gallon containers. More than 40 inspection/collection sites are available to take your rinsed plastic containers to in Nebraska. Two pesticide container recycling dates have been established in Lancaster County.



The UNL Cooperative Extension in Lancaster County, in conjunction with local businesses, will be holding public collection days from 9 a.m. to 3 p.m. at the following locations:

- July 9 — Farmers Cooperative, Waverly
- July 23 — Farmers Cooperative, Bennet

In addition, the Lancaster County Extension office, located at 444 Cherrycreek Road in Lincoln, will accept containers now through Oct. 31 by appointment during business hours. Call 441-7180 for directions.

All liquid pesticide containers require proper rinsing (triple rinsing or pressure rinsing). Rinse the containers immediately after emptying and place the rinse water in the spray tank for application on the labeled site. It is illegal to burn the containers. Crop oil and adjuvant containers may also be recycled. Please remove caps and plastic labels or multi-layered paper labels.

Commercial applicators are encouraged to recycle their customer's plastic containers at these sites.

Last year, more than 167,000 pounds (83.5 tons) of plastic from pesticide containers were recycled in Nebraska. This plastic is kept separate from regular recycling channels and only goes into environmentally safe uses such as pesticide shipping pallets, agricultural drain tile, parking lot tire bumpers, rail road ties, plastic lumber, etc. (TD)

“Small Scale Animal Feeding” is June Rural Living Clinic

The University of Nebraska Cooperative Extension is presenting a series of seminars entitled “Acreage Insights — Rural Living Clinics” to help acreage owners manage their rural living environment. “Small Scale Animal Feeding” is the sixth in the series, to be held June 24 from 9 to 11 a.m. at the Lancaster Extension Education Center, 444 Cherrycreek Road. It will address raising small numbers of meat animals (hogs and beef) being grown for the home freezer.

There is an old story about a farmer who was seen holding a feeder pig, tied to the end of a long pole, up to an oak tree. A passerby stopped and asked the farmer what he was doing. The farmer replied, “I'm feeding my pig acorns.” The passerby replied, “Doesn't that take a lot of time?” and the farmer answered, “What's time to a hog?”

Time may not mean much to a hog, but time does matter when the goal is to produce meat animals on the acreage as an economical alternative to purchasing it at the grocer.

Animals do best when fed a diet that provides the correct balance of energy, protein, vitamins and minerals. Commercial feeding operations recognize the importance of providing balanced diets for their animals. They adjust the ration according to the stage of growth of the animal and they track the prices of alternative feed sources to advantage of the most economical feedstuffs in the ration.

While the small scale producer may not have access to as many feed ingredient choices, it is still important to feed a ration that provides the nutritional needs of the animals in order to optimize the rate of growth and gain and minimize

the cost of the feed.

Seminar participants will be provided references listing daily nutrient and water requirements for swine and beef animals. They will learn to balance rations using a simple calculation technique that only requires a pocket calculator. They also will be shown how to use some public domain computerized spreadsheet programs to compute finishing swine and cattle rations (considering energy and protein only) — these Excel spreadsheets will be provided to participants as part of the take-home materials.

Pre-registration is \$10 per person and must be received three working-days before the program. Late registration is \$15 per person. For more information, visit the Acreage & Small Farm Insights Web site at acreage.unl.edu or call Sarah Browning at (402) 727-2775.

Wheat Plot Tour June 10

Extension will be hosting a wheat variety and disease management plot tour on June 10. Participants are asked to gather at the University of Nebraska field research site just west of 84 Street on Havelock Avenue. Registration starts at 8:30 a.m. Coffee and donuts will be served. The plot tour will begin at 9. There is no registration fee.

Dr. Stephen Baenziger will present variety trials containing over 50 experimental lines and blends in the State Variety Trial. Participants will also see some of the university's Clearfield wheat experimental line evaluation trials plus winter barley and triticale varieties. Dr. John Watkins will discuss ongoing wheat disease management trials. Participants will see 15 treatments in the wheat fungicide plot. Most will be registered products and include BASF's Headline, Bayer's Stratego and Folicur and Syngenta's Tilt, Quadris and Quilt. (TD)

The Nebraska LEAD Program

(LEADERSHIP EDUCATION/ACTION DEVELOPMENT)

The Nebraska LEAD Program is a comprehensive, two-year, statewide, agricultural leadership development program designed to speed up the leadership development process to better prepare the problem solvers, decision-makers and spokespersons for both agriculture and the State of Nebraska. Through monthly, three-day, seminars the program promotes awareness, understanding and involvement in leadership positions at all levels. A national and international study/travel seminar is also a part of the program. Up to 30 individuals are annually selected from across Nebraska. The program is sponsored by the Nebraska Agricultural Leadership Council, Inc. in cooperation with the Institute of Agricultural and Natural Resources of University of Nebraska-Lincoln.

Qualifications

- Be a resident of the state of Nebraska for the past three years.
- Be willing to commit the time necessary for full participation.
- Be actively involved in production agriculture or agribusiness.
- Be motivated and open to new ideas and differing points of view.

Application Deadline

Application deadline is June 15, 2004
Applications may be requested by calling (402) 472-6810

See our Web site at www.ianr.unl.edu/lead

LEAD

Nebraska LEAD Program
Nebraska Agricultural Leadership Council, Inc.

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