The Oklahoma Cooperative Extension Service
Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.

- It is administered by the land-grant university as designated by the state legislature through an Extension director.

- Extension programs are nonpolitical, objective, and research-based information.

- It provides practical, problem-oriented education

for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.

- It utilizes research from university, government, and other sources to help people make their own decisions.

- More than a million volunteers help multiply the impact of the Extension professional staff.

- It dispenses no funds to the public.

- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.

- Local programs are developed and carried out in full recognition of national problems and goals.

- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.

- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

Agribusiness Management Series
Oklahoma Wheat Stocker Spreadsheet Decision Aid

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Oklahoma Cooperative Extension Fact Sheets are also available on our website at:
http://osufacts.okstate.edu

NAME	DEMO
Date	August 1, 2009

The next cells request the purchase location for the stocker calves. A pop-up menu will ask the user to choose from either the Oklahoma City (OKC) or the "Oklahoma Combined" auctions. By pressing the "UPDATE PRICE DATA" button, the program will download a file from the internet with the most recent USDA price data available for Oklahoma locations. **Note:** if you have internet access requiring a login ID and password, open the internet browser and login before using the download feature. The program uses the price and location information to generate a purchase price forecast, if the user chooses to do so.

What location's price data do you want use?	OKC
The current price data is dated as	July 15, 2009
Do you want to update price data?	UPDATE PRICE DATA

The Oklahoma Wheat Stocker Budget Generator was developed to assist producers project economic profitability of their wheat stocker enterprise. The program is a joint project of the Departments of Agricultural Economics and Animal Science at Oklahoma State University. The program can be downloaded from: http://www.agecon.okstate.edu/faculty/publications.asp (Author: DeVuyst; Type: Spreadsheet).

The program will work best in MS Excel 2007, but will also run on MS Excel 2003 if the user has downloaded and installed conversion software from Microsoft. For the program to function properly, the user must allow the macro features of MS Excel. In MS Excel 2007, the user is prompted with a warning just below the button bar that macros have been disabled. Click on the warning and enable macros. In MS Excel 2003, the user must change the security level to medium or low to enable macros.

The third set of cells request the **Expected purchase date, Days in the receiving program,** and **Days grazing wheat.** The purchase month can be entered using a drop down menu. The **Expected sale date** is calculated using this information.

Expected purchase date	Nov	1	2009
Days in receiving program	30		
Days grazed on wheat	90		
Expected sale date	29-Feb		

Data Requirement

The program enables the user to supply price and production information. However, price forecasts for both purchase and sales can be generated by the program if the user has internet access.

Only cells with a yellow background and black text are changeable. All other cells are calculated automatically by the program, are not accessible to the user, and have a light blue or green background.

The first input cells request a name for the budget being generated and the current date. These fields are optional.

The user next must supply information regarding the stocker **Purchase weight** (lb per head) and **Purchase price** ($ per cwt). If stockers have already been purchased, enter actual weight and price. Alternatively, the program can generate an expected purchase price. At cells F21 or H21, simultaneously pressing "control" (ctrl) and "t" will generate an expected purchase price based on location, current market

price, and a seasonality index. **Note:** pressing ctrl-t will write over previously entered price data. If you choose to, you can write over the computer-generated forecast at any time and reproduce it again by pressing ctrl-t at cells F21 and H21.

		Steers	Heifers
Purchase weight	lb/head	450	450
Purchase price	$/cwt	115.81	97.39
Purchase cost	$/head	521.12	438.26

Enter estimates of expected average daily gain (ADG) for both the receiving program and for the time grazing wheat. Also, enter an estimate of expected death loss. **Stocking density** must be entered in head per acre at the time calves are put on wheat pasture. The program then reports density in pounds per acre.

Production costs are entered under four general headings. **Veterinary cost** includes all anticipated expenses for vaccination, treatments, and parasite control in $ per head. **Marketing cost** includes transportation costs, buyer fees, commissions, and check off fees in dollars per head. **Other costs per month** include costs not included in the previous two headings and items in **Cost of gain. Cost of gain** can be entered directly into the budget or by using a detailed worksheet. Cost of gain, entered in $ per pound of gain, includes all purchased feeds, mineral, pasture rent, machinery and equipment expenses, labor, and management. The detailed worksheet can be accessed at cells F33 and H33 by pressing ctrl-t.

Receiving program ADG	lb/day	1.25	1.00
Wheat grazing ADG	lb/day	3.00	2.75
Death loss	percent	1.5%	1.0%
Stocking density	head/acre	0.5	0.6
	lb/acre	225.0	270.0

Veterinary cost	$/head	$5.00	$5.00
Marketing cost	$/head	$5.00	$5.00
Other costs per month	$/head	$1.00	$1.00
Cost of gain	$/lb	$0.65	$0.68

The **Cost of Gain Analysis,** accessed at cells F33 and H33 by pressing ctrl-t, allows the user to enter feed and other costs using a detailed worksheet. Hay, supplement, and mineral prices are entered in $ per ton (as fed). Hay and supplement quantities fed are entered in pounds per head per day and mineral in ounces per head per day for both receiving and wheat grazing. Wheat pasture rent can be entered as $ per cwt per month or $ per pound of gain using the pop-up menu at cell F12. The program then computes feed costs for both the receiving and grazing periods. Transportation to pasture and other receiving costs are entered as $ per head. The cost of implanting, equipment and machinery, management fees and other costs are entered as $ per head during the entire grazing period. Labor is enter as $ per head per day for receiving and grazing periods.

Results from the **Cost of Gain Analysis** are reported as **Total Receiving and Grazing Expenses** (in $ per head) and as **Cost of Gain** (in $ per pound of gain). These results can be automatically transferred to the **Budget** tab (cells F33 and H33) by left clicking on the **Return to Inputs Page.** If the user does not want these results to be transferred to the **Budget** tab, left click on **Cancel and Return to Inputs.**

To approximate the opportunity cost of equity and cost of financing, enter an annual Interest rate as a percentage.

Interest rate	%	6.0%

The final data requirements are expected sales prices. The program will generate a price forecast if the user presses ctrl-t at cells F42 or J42. Alternatively, the user can enter a price directly into cells F42 and J42. Note, the price should be based on the weight of animals being sold.

The remaining cells in the Wheat Stocker Spreadsheet Decision Aid are automatically calculated by the program. All results are report in $ per head purchased (i.e., "deads in"). Selected results are reported in $ per day per head purchased. Results include Gross Revenue, Total Expense, Net Return, Breakeven Price and Net Return per acre.

Cost of Gain Analysis			Steers	Heifers
Receiving Weight (lb)			450	450
Receiving Program Expenses	30 days			
Hay costs	Price ($/ton)	$80	lb/head/day	15	15
Supplement	Price ($/ton)	$300	lb/head/day	2	2
Mineral	Price ($/ton)	$1,000	oz/head/day	4	4
Transport to pasture $/head			$2.50	$2.50
Other receiving costs $/head				
Total receiving program expenses		$/head	$29.97	$29.97
Wheat Pasture Grazing Expenses				
Wheat pasture rent ($/head)	$/cwt/month	$8.00	$146.95	$135.44
Hay costs	Price ($/ton)	$80	lb/head/day	3	3
Supplement	Price ($/ton)	$400	lb/head/day	0	0
Mineral	Price ($/ton)	$401	oz/head/day	4	4
Implant cost		$/head	$1.50	$1.50
Labor	120 Days	$/head/day	$0.10	$0.10
Equipment and machinery		$/head	$1.00	$1.00
Management fee		$/head	$1.00	$1.00
Other		$/head	$0.00	$0.00
Total Pasture Grazing Expenses		$/head	$170.81	$159.31
Total Receiving and Grazing Expenses		$/head	$200.78	$189.28
Gain		lbs	308	278
Cost of gain		$/lbs	$0.65	$0.68

Wheat Stocker Enterprise Budget					
		Steers		Heifers	
Revenue		Total	Daily	Total	Daily
Sales weight	lbs/head	746.14	2.56	720.23	2.31
Sales price	$/cwt	98.88	98.88	94.41	94.41
Gross Revenue	$/head	737.79	2.53	679.98	2.18
Expense per head sold					
Purchase	$/head	529.06		442.68	
Cost of gain	$/head	200.80	1.67	189.28	1.58
Vet, Marketing and Other	$/head	14.01	0.12	13.98	0.12
Interest expense	$/head	12.55	0.10	10.74	0.09
Total Expense	$/head	756.42		656.69	
Net Return	$/head	-18.63		23.29	
Breakeven Price	$/cwt	101.38		91.18	
Net Return per acre	$/acre	-9.32		13.98	