

DECISION SUPPORT TOOLS

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Table 1. Smart phone applications available to beef producers. Many of these apps will also work on a tablet as well. Apps listed here are available at iTunes or Google Play for Android. Please note this is not a complete list.

Application	Created by	Costs	Description
AI Cowculator	University of Florida/Zoetis	Free	Assists in decision to AI or purchase a natural service sire
BCI Pregnancy Analytics	Kansas State University	Free	Allows animal and pregnancy information to be entered chute-side
Cattle Market Mobile	Grainger Software	Free	Provides current cattle prices, gestation calculator, calf estimated price calculator
Farm and Ranch Recordkeeping	University of Nebraska ¹	Free	Keeps a record of farm receipts and expenses
GrassSnap	University of Nebraska ¹	Free	Photo monitors grasslands
Land Lease Calculator	University of Nebraska ¹	Free	Collects information that might be charged for ag land leases
Livestock Heat Stress	USDA MARC	Free	Provides heat stress forecast maps for livestock
Mobile Cattle Tracker	University of Nebraska ¹	\$9.99	Collects and accesses cattle records when they are needed
NUBeef - Anatomy	University of Nebraska ¹	\$4.99	Visual and text information about muscles and bones of the beef carcass
NUBeef - BCS	University of Nebraska ¹	\$.99	Assist in managing nutrition programs for beef cattle
NUBeef-cowQlate	University of Nebraska ¹	\$.99	Collection of calculators for ag producers.
Teat and Udder scoring	University of Nebraska ¹	\$.99	Visual and text information about the conformation of a beef cow's teats and udder.

¹The University of Nebraska Beef Apps can also be found at <http://beef.unl.edu/mobile-apps>. Computer decision support tools are available at <http://extension.unl.edu/statewide/westcentral/ag-economics/>

Table 2. An example of how the NUBeef-cowQlate app calculates the cost of different feed sources for energy and protein. As you can see Alfalfa hay is a good buy for both protein and TDN (Total Digestible Nutrients) followed by hay and distillers grain and then cubes. Your results may vary depending on which feeds you select and your costs.

Alfalfa Hay (good 18%)	Corn	Grass Hay	Cubes	Distillers Grain
\$70.00/ton	\$3.10/bushel	\$60.00/ton	\$240.00/ton	\$120.00/ton
.21 CP/lb	.70 CP/lb	.30 CP/lb	.61 CP/lb	.31/ CP/lb
.07 TDN/lb	.08 TDN/ lb	.07 TDN/lb	.18 TDN/lb	.06/ TDN/lb
.04 DM/lb	.06 DM/lb	.03 DM/lb	.13 DM/lb	.07 DM/lb

Table 3. An example of the information obtained from the BCI application.

Tag Number	Condition	Age	Days Pregnant	Breed	Calving Date	Interval
316	Over	Cow	150	Angus Hereford	2/26/2017	First 21 day interval
449	Thin	First Calf Heifer	120	Angus	3/29/2017	Second 21 day interval
515	Moderate	Heifer	110	Angus	4/8/2017	Third 21 day interval
451	Moderate	First Calf Heifer	85	Angus Hereford	5/3/2017	Fourth 21 day interval
280	Moderate	Cow	0	Angus		interval open

Table 4. An example of the information obtained from the Mobile Cattle Tracker app.

Dam Record	Dam Birthdate	Dam Management Group	Dam Preg check date	Dam Days Pregnant	Dam Preg check BCS	Dam Preg check wt
316	2013		10/17/2016	150	6.5	
449	2014		10/17/2016	120	4.5	
515	2015		10/17/2016	105	5	
451	2014		10/17/2016	75	5	
280	2012		10/17/2016	0	5	

Table 5. Below are some pros and cons for apps I have utilized.

Application	Pros	Cons
Mobile Cattle Tracker	<ul style="list-style-type: none"> ▪ Keeps several records making it worth the \$9.99. ▪ Sends results by e-mail to computer so you can manipulate data. ▪ Easy to use chute side. 	<ul style="list-style-type: none"> ▪ Takes time to enter because of scrolling to enter data. ▪ Days pregnant skips some of the days vet gives. ▪ Does not give approximate calf birth date.
BCI Pregnancy Analytics	<ul style="list-style-type: none"> ▪ Type in numbers instead of scrolling, which is faster. ▪ Does nice job of sending data via e-mail. Can manipulate data on computer. ▪ Can use chute side. ▪ Gives approximate birthdate of calf for each cow checked. 	<ul style="list-style-type: none"> ▪ Must have internet and slows down as you enter more data points. Locked up during data entry for me.
NUBeef-cowQlate	<ul style="list-style-type: none"> ▪ Good job of calculating cost per/lb protein and TDN. ▪ Also has cornstalk calculator, dry matter conversion calculator, and gestation calculator. 	<ul style="list-style-type: none"> ▪ Must know nutrient analysis of feed or book values. ▪ Shows 4 feeds at a time. ▪ Needs an e-mail feature to e-mail data.
AI Cowculator	<ul style="list-style-type: none"> ▪ Has heat protocols for cows. ▪ Can calculate bull costs vs AI costs. ▪ Resource page. 	<ul style="list-style-type: none"> ▪ Would like it to have a scheduler for timed AI.
Cattle Market Mobile	<ul style="list-style-type: none"> ▪ Gives current local auction prices. ▪ Has calf price calculator and a gestation calculator. ▪ Easy to use. 	<ul style="list-style-type: none"> ▪ Does not have cattle futures market.
NUBeef - BCS	<ul style="list-style-type: none"> ▪ Helps producers learn body condition scoring as well as keeps data on cow herd 	<ul style="list-style-type: none"> ▪ Only records BCS, no other data collected.
GrassSnap	<ul style="list-style-type: none"> ▪ Good monitor for range and grassland condition over time. 	<ul style="list-style-type: none"> ▪ Needs an e-mail option to print pictures.
Teat and Udder Scoring	<ul style="list-style-type: none"> ▪ Good to learn how to score teats and udders. 	<ul style="list-style-type: none"> ▪ Could use larger pictures.

