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Ranching 101: Ranch Record Keeping

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About CattleMax


- Company founded in 1999
- Based in Bryan/College Station, TX
- Rancher-based team in Texas, Montana, and Illinois
- Customers in 70+ countries






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Record Keeping Throughout the Ages



Past



20th Century



21st Century

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Cattle Identification

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Why Tag Your Cattle?

- Inventory control
- Animal Management
- Compliance



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What You'll Get by Identifying your Cattle

- Breeding Cattle Inventory
- Female Culling
- Carcass Data for Female Selection
- Premium beef programs
- Make the most of your production & mgmt processes

* Ideas based on: "Individual Cattle Identity Records for Cow-Calf Producers: Ways to Make Records Cost Effective" by James M. McGrann, Lawrence Falconer, and Gary Rupp.

Obtaining your Premises ID

What is a Premises Identification Number (Premises ID)?

"A national premises identification number (PIN) is a unique number, permanently assigned to a physical address where agricultural animals are located. All owner and premises information collected is stored and maintained in a federal database."

To obtain a PIN, contact the TAHC Animal Disease Traceability (ADT) department at 1-800-550-8242 ext. 733, visit www.tahc.texas.gov, or visit your local TAHC region office.

USDA Animal Disease Traceability



Effective March 11, 2013

"Under the final rule, unless specifically exempted, livestock moved interstate would have to be officially identified* and accompanied by an interstate certificate of veterinary inspection or other documentation, such as owner-shipper statements or brand certificates."

"Beef cattle under 18 months of age, unless they are moved interstate for shows, exhibitions, rodeos, or recreational events, are exempt from the official identification requirement in this rule."

* Official identifications vary by state

Complete details can be found at <http://www.aphis.usda.gov>



Texas Animal Health Commission Animal Disease Traceability



"All adult breeding cattle (>18months), except cattle going directly to slaughter, shall be permanently identified **within seven days of change of ownership**."

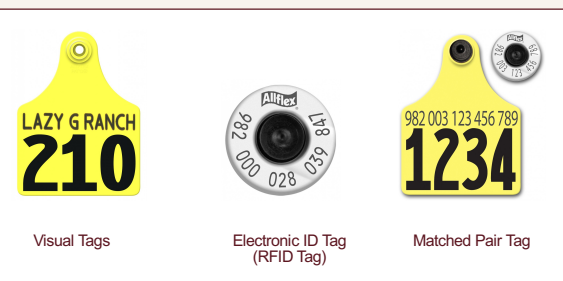
Untagged adult cattle have seven days after purchase to be delivered to a slaughter facility, resold through a livestock market, or have acceptable permanent official identification applied. Slaughter type cattle that will be put on feed prior to slaughter shall also be permanently identified within seven days of purchase."

Various acceptable forms of official identification as of May 2017 include:

- USDA NUES tags (silver metal ear tags)
- USDA Brucellosis Calfhood Vaccination tags (orange metal ear tags)
- USDA approved 15-digit Animal Identification Number (AIN) as RFID or Visual tag
- Breed association registration tattoo, freeze or fire brand + reg. paper

Complete details at: <http://www.tahc.state.tx.us/adtl/>

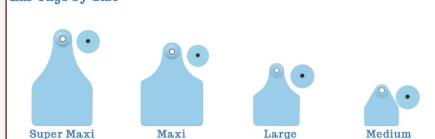
Types of Cattle Tags



Visual Tag Sizes

- Super Maxi (4 5/8" x 3")
- Maxi (4" x 3")
- Large (3" x 2 1/4")
- Medium (2" x 1 5/8")

Ear Tags by Size



Popular Layout Options



Approximate Cattle Tag & EID Costs

- Ear Tag: ~\$1.45
- Electronic ID Tag: \$2.20
- Matched Pair Tag: ~\$3.75
- Tag Applicator: \$24.00
- EID Reader: \$345 - \$1,375


LPR reader (compact 9" long, no screen): \$325
Stick reader (~ 24" long, has screen & addl features): \$1,375

Cattle Numbering System Example

A 1969	U 1986	N 2003
B 1970	W 1987	P 2004
C 1971	X 1988	R 2005
D 1972	Y 1989	S 2006
E 1973	Z 1990	T 2007
F 1974	A 1991	U 2008
G 1975	B 1992	W 2009
H 1976	C 1993	X 2010
J 1977	D 1994	Y 2011
K 1978	E 1995	Z 2012
L 1979	F 1996	A 2013
M 1980	G 1997	B 2014
N 1981	H 1998	C 2015
P 1982	J 1999	D 2016
R 1983	K 2000	E 2017
S 1984	L 2001	F 2018
T 1985	M 2002	G 2019

In Practice:

- Cow 123C is born in 2015
- Her bull calf 123E is born in 2017
- Her heifer calf 123F is born in 2018
- Heifer calf 123F is kept as replacement and retagged to 150F



Source: Beef Improvement Federation

Cattle Weighing

Why Weigh Your Cattle?

- We sell by the pound (commercial operations)
- Our customers sell by the pound (registered operations)
- Identify efficient cattle for breeding
- Identify inefficient cattle for culling
- Submit weights to breed associations
- Ensure accurate medical treatment dosages
- Generate performance measures (ADG, WDA, ratios, etc)

"You can't manage what you can't measure"
- Peter Drucker, 1993

Where will you weigh your cattle?




Under a Squeeze Chute
(Permanent)




Under a Platform
(Portable)


How will you be recording weights?



Not at All



Pencil and Paper



Scale Indicator

What can you do with a weight?

- Adjusted Weaning Weight (AWW, also ABW, AYW)
- Weight per Day of Age (WDA)
- Average Daily Gain (ADG)
- Percent Dam Weight
- Dam MPPA
- Ratios (Weight, ADG, WDA)
- Used in EPDs (registered cattle)

Approximate Cattle Scales Costs

Portable

- Load bars: ~\$1,100
- Platform: ~\$550

Permanent

- Load bars: ~\$1,800

Scale Indicators

- Display weight only: \$785
- Download capability: \$1,349+

5% Rebate for TSCRA members on Tru-Test scales

Cattle Record Keeping

Why Keep Cattle Records?

How keeping good records can help increase your bottom line.

- Learn which cattle are truly productive
- Identify cows for culling
- Demonstrate goal of running ranch as a business
- Track sales and purchases for taxes and accounting

“Investing” in a management system

Your time is the biggest investment you will make in cattle record keeping

Investment

- Money - Software, hardware, tags, reader
- Setup Time – tagging cattle, entering records, learning components
- Update Time – updating records with births, sales, treatments, etc

Returns

- Save Time
- Better organization
- Quality and Accuracy
- Understood by others
- Marketing
- Improved decision making



Key Cattle Records to Track

Organize all of your information in a single place

○ Production records

Breeding history, pregnancy checks, calvings

○ Performance records

Weights, BCS, hip heights, carcass

○ Health records

Medical treatments, notes, pasture movements

○ Financial/tax records

Purchases, sales, death loss, income & expenses

○ Seedstock records

EPDs, pedigrees, semen & embryos

Cattle record keeping options

Several tools to get the job done

Benefit	Paper	Spreadsheets	Software
Easy to backup		Yes	Yes
Easily read by others		Yes	Yes
Time saving features		Limited	Yes
Data export capabilities		Limited	Yes
Data import capabilities			Yes
Equipment compatibility			Yes
Data validation and error checking			Yes
Flexible reporting			Yes

Reporting

Makes a real difference in getting benefit of your record keeping time/effort

Types of Reports

- Inventory Lists
- Animal Performance Analysis on individual and herd level
- Financial summaries for analysis and tax needs

Report Options

- Sorting
- Filtering
- Grouping
- Exporting to Excel

“A record keeping system without reporting and analysis is simply an electronic file cabinet.”

- Louis Martin

How do we make hay in 2017?



A



B

PC: North Bay Hay & Grain, John Deere

So why are we keeping paper records in 2017?



A



B

PC: Kids, Cows and Grass

Trends in Herd Management

Web-based software

- Use on desktops and laptops for the office
- Tablets at home
- Smartphones in the pasture
- Work from anywhere
- CattleMax starts at \$9/month
- QuickBooks Online starts at \$10/month





Production Records

Weaning

Criteria: Animal Status = Active, Animal Category = Fall Calvers

Weaned	Avg. WW	Avg. AWW	ADG	WDA	
192	542.16	460.42	1.88	2.12	
Avg Age: 300 days Total lbs: 104085					
Animal Ear Tag	Weaning Date	Category	Measure Date	Weight	Adjusted Weight
20-93		Weaning	540	478	
55-06		Weaning	540	496	

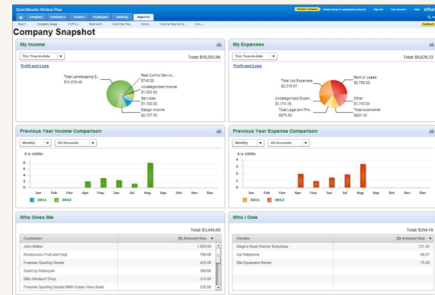
Pregnancy Checks

Criteria: Check Method = Palpator, Animal Category = Fall Calvers, Animal Status = Active

Total Pregnancy Checks	Pregnant	Open	Recheck
264	231	33	0
% of Checks: 87.8%			
% of Checks: 12.5%			
% of Checks: 0.00%			
Animal Ear Tag	Check Date	Time Pregnant	Expected Due Date
17-96	11-12-2012	6	02-21-2013
50-06	11-12-2012	6	03-24-2013

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Financial Records - QuickBooks



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Increased collaboration across the ranch

- Data entry in the field
- Generational transition
- Owners, managers, employees, spouses



Bring your own device

- Desktops and laptops for the office
- Tablets at home
- Smartphones in the pasture



CattleMax cattle software

CattleMax software

- On-farm herd management and production records software
- Accessible from any web browser
- Herd sizes from 10 head in to the thousands
- Editions for Commercial and Registered Herds
- Pricing starts at \$9/month

TSCRA Members receive
10% Discount



Exchanging data with breed associations

- **Herd extract (inventory)**
Active animals, weights, EPDs, 3-gen pedigree
- **Electronic registration**
Register cattle using information already in your records
- **Performance data**
Report weights, heights, carcass data
- **EPD updates**
Stay current with each sire summary

Streamlining data collection with digital scales

- Install under squeeze chute or in alley
- Store weights for importing in to spreadsheet or software
- Calculate average daily gain
- Ensure accurate treatment dosages



Efficient cattle working with RFID tags

- Round tag the size of a half dollar
- Priced ~\$2.25/tag, readers start at \$345
- Scan and store list of scanned tags
- Scan and lookup on phone



CattleMax Editions and Pricing

Low monthly fee or pay yearly and receive one free month

Edition	Monthly	or Yearly
Commercial – 100 active animals	\$9	\$99
Commercial – 250 active animals	\$12	\$132
Commercial – 500 active animals	\$14	\$154
Commercial – 750 active animals	\$20	\$220
Commercial – 1,000 active animals	\$24	\$264
Registered – 100 active animals	\$15	\$165
Registered – 250 active animals	\$20	\$220
Registered – 500 active animals	\$25	\$275
Registered – 750 active animals	\$35	\$385
Registered Large – 1,000 active animals	\$45	\$495

10% TSCRA Member Discount

Larger Plans Available

See CattleMax in Action

Dashboard

The dashboard displays a production cycle flow: Breeding → Pregnancy Checking → Calving → Weaning → Yearling. Management sections include Herd Health, Financial, and Equipment. A calendar for December 2018 is shown on the right. Summary statistics at the bottom indicate: 1 Active Bull (1 head on, 0 herd sire prospect), 20 Active Cows (2 pregnant, 1 open, 18 weaned), and 247 Active Calves (245 weaned, 1 weaned).

Animal Record

1025 Exposed Cow

Latest Activity

Date	Details
10-25-2018	100c Inseminated Plus
03-26-2018	NO Inseminating to 579R
12-13-2018	name

General

ID Number: 1025
 Sex: Female
 Breed: 96000004020003
 Status: Active
 Current Age: 12 years and 3 months
 Birth Date: 08-13-2006
 Conception Method: NS

Calving List

Calving

Includes: 18 rows
 Columns: 60 columns and 60 columns status

Click "Add Calf" or "No Calf" by Cows

Cow	Pasture	Due Date	Method	Weaning
01		05-18-2019	NS	Bul 123
02		05-18-2019	NS	Bul 123
03		05-18-2019	NS	Bul 123
04		05-18-2019	NS	Bul 123
05		05-18-2019	NS	Bul 123
06		05-18-2019	NS	Bul 123
07		05-18-2019	NS	Bul 123
08		05-18-2019	NS	Bul 123
09		05-18-2019	NS	Bul 123
10		05-18-2019	NS	Bul 123
11		05-18-2019	NS	Bul 123
12		05-18-2019	NS	Bul 123
13		05-18-2019	NS	Bul 123
14		05-18-2019	NS	Bul 123
15		05-18-2019	NS	Bul 123
16		05-18-2019	NS	Bul 123
17		05-18-2019	NS	Bul 123
18		05-18-2019	NS	Bul 123
19		05-18-2019	NS	Bul 123
20		05-18-2019	NS	Bul 123
21		05-18-2019	NS	Bul 123
22		05-18-2019	NS	Bul 123
23		05-18-2019	NS	Bul 123
24		05-18-2019	NS	Bul 123
25		05-18-2019	NS	Bul 123
26		05-18-2019	NS	Bul 123
27		05-18-2019	NS	Bul 123
28		05-18-2019	NS	Bul 123
29		05-18-2019	NS	Bul 123
30		05-18-2019	NS	Bul 123
31		05-18-2019	NS	Bul 123
32		05-18-2019	NS	Bul 123
33		05-18-2019	NS	Bul 123
34		05-18-2019	NS	Bul 123
35		05-18-2019	NS	Bul 123
36		05-18-2019	NS	Bul 123
37		05-18-2019	NS	Bul 123
38		05-18-2019	NS	Bul 123
39		05-18-2019	NS	Bul 123
40		05-18-2019	NS	Bul 123
41		05-18-2019	NS	Bul 123
42		05-18-2019	NS	Bul 123
43		05-18-2019	NS	Bul 123
44		05-18-2019	NS	Bul 123
45		05-18-2019	NS	Bul 123
46		05-18-2019	NS	Bul 123
47		05-18-2019	NS	Bul 123
48		05-18-2019	NS	Bul 123
49		05-18-2019	NS	Bul 123
50		05-18-2019	NS	Bul 123
51		05-18-2019	NS	Bul 123
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57		05-18-2019	NS	Bul 123
58		05-18-2019	NS	Bul 123
59		05-18-2019	NS	Bul 123
60		05-18-2019	NS	Bul 123

Reports & Worksheets

Cattle Inventory Report

Online Status: Active Total: 268 records

All Animals	Bulls	Cows	Calves
268	1	20	247
% of herd: 100.00%	% of herd: 0.37%	% of herd: 7.48%	% of herd: 92.15%

Ear Tag	Animal Type	Birth Date	Age in Weeks
01	Cow	01-24-2010	8
02	Cow	01-24-2010	8
03	Cow	01-24-2010	8
04	Cow	01-24-2010	8
05	Cow	01-24-2010	8
06	Cow	01-24-2010	8
07	Cow	01-24-2010	8
08	Cow	01-24-2010	8
09	Cow	01-24-2010	8
1000	Cow	10-10-2008	9
1001	Cow	09-07-2004	14
1005	Cow	08-10-2008	13
1006	Cow	08-31-2011	7

Equipment

Equipment

Name	Location
International 808	
Ranch Elbow	
Feed Grindor	
M7000	
Stack Trailer	
Pasture Sprayer	
Bush Hog	

Rainfall

Rainfall

Month To Date: 0.5 in
 Year To Date: 9.0 in
 All of Last Year (2017): 4.85 in

Monthly Totals

Month	2018	2017	2016	2015	2014
January	-	0.2	-	-	-
February	-	-	-	-	-
March	-	3.5	-	-	-
April	-	1.15	-	-	-
May	-	-	-	-	-
June	-	-	-	-	-
July	1.25	-	-	-	-
August	4.0	-	-	-	-
September	-	-	-	-	-

Recent Rainfall

Rainfall Date	Rainfall Amt	Location
12-01-2018	0.5	Ranch
11-03-2018	0.75	
10-31-2018	2.3	
09-05-2018	1.25	Home
08-07-2018	0.5	
08-05-2018	0.75	Home
08-01-2018	1.5	Home

Financial

Financial Summary

January 1, 2018 - December 31, 2018

Category	Amount
Income	
*Cattle Sales	\$18,838.70
*Enterprise Sales	\$1,000.00
Hay Sales	\$5,331.00
Labor	\$300.00
Total Income	\$25,470.70
Cost of Goods Sold	\$256.00
gross profit	\$25,214.70
Expenses	
Equipment	\$1,310.00
Fuel	\$1,807.00
Fencing	\$1,000.00
Fuel	\$1,000.00
Total Expenses	\$5,117.00
NET INCOME	\$19,097.70

Expenses by Category

- End of Year Overview
- Sales Taxes
- Income
- Taxes

Income by Category

- \$1,000.00 - Fencing
- \$1,807.00 - Fuel
- \$5,331.00 - Hay Ticket Expenses
- \$1,807.00 - Fuel
- \$1,918.00 - Equipment