

## Artificial Insemination

- Use High Quality/Proven Bulls
- Better Daily Gains
- Improve Carcass Traits
- Higher Quality Replacement Heifers



The cost to synchronize and breed a cow AI is as follows:

<b>Semen</b>	<b>\$12/straw</b>
<b>Prostaglandin</b>	<b>\$2.15/5 cc Dose</b>
<b>GnRH</b>	<b>\$3 for 2 doses @ 1.5 cc</b>
<b>Chute/Heat Detection</b>	<b>\$6/cow</b>
<b>Insemination</b>	<b><u>\$2.50/cow</u></b>
	<b>\$25.65</b>

**\$25.65 / .65 estimated AI pregnancy rate = \$39.46 per AI pregnant cow**



### Cost to Breed a Cow Natural Service

Purchase cost	\$2,800/bull
Salvage value of bull	\$1,000/bull
	\$1,800/Bull
Number of breeding seasons	4 years
Number of cows exposed (Fall and Spring)	30 hd/year
Bull Cost/Cow Exposed	\$15
Bull Maintenance Cost	
Feed, Vet, Housing	\$450/yr
	\$15/cow
	\$30
<b>\$30/.90 pregnancy rate</b>	<b>\$33.33/natural service pregnant cow</b>

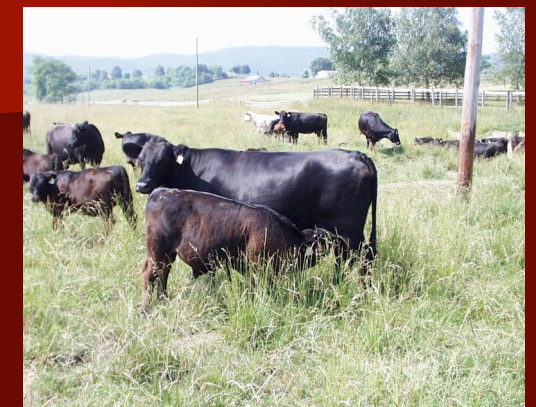
### Estrous Synchronization

- Breed in Short Timeframe
- Increase Pregnancy Rate by 2%
- Fewer Assisted Births: 1.3% AI sired versus 2.9% Natural Service
- Lower Death Loss: 3.5% AI sired versus 5.5% Natural Service.
- Shorten Calving Season: 87% to calve in first thirty days
- Increase Calf Age by 16 days overall; AI sired calves are on average 27 days older



### Fall Calving Pregnancy Check

Group	% Bred AI	% Preg AI	Overall Preg %
Heifers	90	61	90
Two Year Olds	96	74	96
3 Year Olds & Older	93	74	97



## Weaning Weight Comparison

Group	Average Wt	Age	WDA
AI on AI	775 lbs	262 days	2.96
AI on Non-AI	740 lbs.	255 days	2.90
Non-AI on AI	707 lbs.	237 days	2.98
<u>Non-AI on Non-AI</u>	<u>673 lbs.</u>	<u>233 days</u>	<u>2.89</u>
Overall	720 lbs.	245 days	2.94



## Feedyard Performance Comparison Spring 2006 Steer Calves

Group	Live Wt	DOF	ADG
AI on AI	1311 lbs	170	3.21
AI on Non-AI	1260 lbs	172	3.18
Non-AI on AI	1241 lbs	179	3.14
Non-AI on Non-AI	1235 lbs	189	3.13

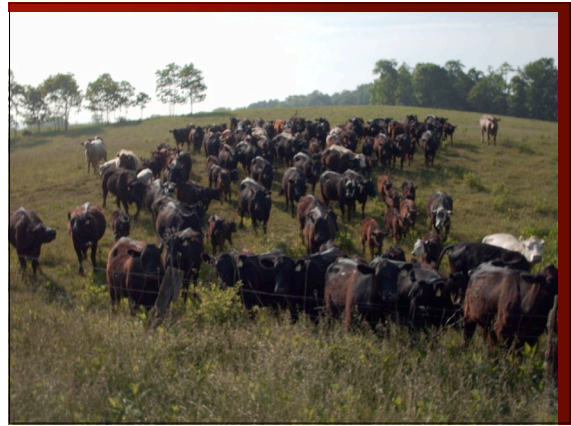
## Carcass Performance Spring Steers

Group	% Ch	% Se	%YG 4	\$ over base
AI on AI	97	3	6	78
AI on Non AI	85	15	8	67
Non AI on AI	74	26	0	56
Non AI on Non AI	61	39	0	32
Overall	80	20	4	60

## Net Return/Cow Spring Steers

Group	Gross \$	Feed	Truck	Net \$
AI on AI	1390	364	54	972
AI on Non AI	1331	368	52	917
Non AI on AI	1290	383	52	857
Non AI on Non AI	1248	404	47	797
<b>Overall</b>	<b>1317</b>	<b>372</b>	<b>50</b>	<b>895</b>





**Comparison Between AI Sired Cows and Non-AI Sired Cows**

	<b>AI Sired Calves</b>		<b>Non-AI Sired Calves</b>	
	<b>Weaning</b>	<b>Slaughter</b>	<b>Weaning</b>	<b>Slaughter</b>
<b>AI Sired Cows</b>	775 lbs	\$972 Net	707 lbs	\$857 Net
<b>Non-AI Sired Cows</b>	740 lbs	\$917 Net	673 lbs	\$797 Net
<i>Difference</i>	35 lbs	\$55	34 lbs	\$60



- Value of the AI Program to Hillwinds Farm for 2006**
- **Production Value/Cow = \$775 (Includes Fall & Spring Herds, Steer & Heifer Calves Sold from Feedyard, Replacement Heifers Sold, and Cull Cows)**
  - **Production Value/Cow for cows that are not AI sired and produced calves that were not AI sired = \$685**
  - **Difference of \$93 with the extra cost to AI being \$6/cow**
  - **With the AI program, we are netting an extra \$87/cow for the entire herd.**
  - **On a herd basis this equates to \$60,000**

