

**Statistics Committee Report  
Fall 2015**

Below are some comments on this year's survey results and proposed changes for next year for the BOD to review and comment on.

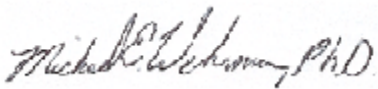
1. Internet data entry went very well. There were a total of 139 certified and 19 non-certified ETB's companies submitting data. Great Job!!!
2. I have included a file that has data table for PY2013. (**files: AETA 2014 Survey tables 1-4.pdf and AETA 2014 Survey tables 5-6.pdf**)
3. The AETA embryo transfer data was submitted to IETS on September 25, 2015. Included is a copy of the report submitted (**file: "IETS USA 2014 data.pdf"**).

Proposed changes for next year:

1. **Changes to FY2015 survey:** At the current time I am not planning on changing the survey for next year and have included the worksheet (**File: AETA 2015 Survey Worksheet.pdf**).

Please review my comments and request and contact me if you need clarification or more input. Thank you for your time and efforts and look forward to hearing your comments, suggestions and guidance on next year's survey.

Sincerely,



Michael E. Wehrman, PhD

**Table 1: 2014 Bovine *in vivo* Embryo Production by Semen Type**

<b>Animal Data</b>		<b>Collection Data</b>							<b>Transfer Data</b>			<b>Manipulated</b>	
<b>Breed Type</b>	<b>Semen Type</b>	<b>Collections</b>	<b>Total Ova</b>	<b>Total Viable</b>	<b>Ave Ova</b>	<b>Ave Viable</b>	<b>% viable</b>	<b>Frozen</b>	<b>Fresh</b>	<b>Frozen</b>	<b>Total</b>	<b>Biopsied</b>	<b>Bisected</b>
<b>Beef</b>	<b>non-sorted</b>	29,788	375,731	213,488	12.6	7.2	56.8%	169,685	43,803	102,308	146,111	92	89
	<b>sex-sorted</b>	1,458	22,468	5,306	15.4	3.6	23.6%	4,286	1,020	1,432	2,452	0	0
	<b>Total</b>	31,246	398,199	218,794	12.7	7.0	54.9%	173,971	44,823	103,740	148,563	92	89
<b>Dairy</b>	<b>non-sorted</b>	13,698	138,566	85,942	10.1	6.3	62.0%	50,208	35,734	28,491	64,225	0	0
	<b>sex-sorted</b>	1,519	15,805	7,518	10.4	4.9	47.6%	5,155	2,363	1,447	3,810	0	0
	<b>Total</b>	15,217	154,371	93,460	10.1	6.1	60.5%	55,363	38,097	29,938	68,035	0	0
<b>Over All Total</b>		<b>46,463</b>	<b>552,570</b>	<b>312,254</b>	<b>11.9</b>	<b>6.7</b>	<b>56.5%</b>	<b>229,334</b>	<b>82,920</b>	<b>133,678</b>	<b>216,598</b>	<b>92</b>	<b>89</b>

**Table 2: 2014 Bovine *in vivo* Embryo Production by Region**

Animal Data		Collection Data						Transfer Data			Manipulated		
Breed Type	Region	Collections	Total Ova	Total Viable	Ave Ova	Ave Viable	% viable	Frozen	Fresh	Frozen	Total	Biopsied	Bisected
<b>Beef</b>	<b>NE</b>	2,204	28,282	14,846	12.8	6.7	52.5%	12,069	2,777	5,449	8,226	0	0
	<b>NC</b>	11,639	155,670	85,618	13.4	7.4	55.0%	74,226	11,392	45,556	56,948	0	0
	<b>NW</b>	1,551	17,192	10,995	11.1	7.1	64.0%	8,477	2,518	5,312	7,830	0	0
	<b>SE</b>	4,366	55,914	32,046	12.8	7.3	57.3%	22,034	10,012	13,560	23,572	0	0
	<b>SC</b>	9,541	126,165	65,759	13.2	6.9	52.1%	49,413	16,346	29,795	46,141	92	89
	<b>SW</b>	1,945	14,976	9,530	7.7	4.9	63.6%	7,752	1,778	4,068	5,846	0	0
	<b>Total</b>		31,246	398,199	218,794	12.7	7.0	54.9%	173,971	44,823	103,740	148,563	92
<b>Dairy</b>	<b>NE</b>	3,908	40,427	23,781	10.3	6.1	58.8%	12,056	11,725	6,007	17,732	0	0
	<b>NC</b>	9,122	91,718	55,994	10.1	6.1	61.1%	36,101	19,893	18,927	38,820	0	0
	<b>NW</b>	335	3,952	2,422	11.8	7.2	61.3%	1,188	1,234	1,275	2,509	0	0
	<b>SE</b>	812	8,015	5,109	9.9	6.3	63.7%	3,247	1,862	1,179	3,041	0	0
	<b>SC</b>	294	2,744	1,530	9.3	5.2	55.8%	1,331	199	348	547	0	0
	<b>SW</b>	746	7,515	4,624	10.1	6.2	61.5%	1,440	3,184	2,202	5,386	0	0
	<b>Total</b>		15,217	154,371	93,460	10.1	6.1	60.5%	55,363	38,097	29,938	68,035	0
<b>Over All Total</b>		<b>46,463</b>	<b>552,570</b>	<b>312,254</b>	<b>11.9</b>	<b>6.7</b>	<b>56.5%</b>	<b>229,334</b>	<b>82,920</b>	<b>133,678</b>	<b>216,598</b>	<b>92</b>	<b>89</b>

**Table 3: 2014 Bovine *in vitro* Embryo Production**

Collection Data												Transfer Data		
Breed Type	OPU's	Oocytes	Total Viable	Ave Oocytes	Ave Viable	% Viable	Frozen	Fresh	Frozen	Total				
Bovine	19,226	413,120	109,194	21.5	5.7	26.4%	55,993	30,306	13,775	44,081				
	Dairy	20,478	349,639	84,505	17.1	4.2	24.2%	21,386	33,788	6,505	40,293			
<b>Total</b>	<b>39,704</b>	<b>762,759</b>	<b>193,699</b>	<b>19.2</b>	<b>5.2</b>	<b>25.4%</b>	<b>77,379</b>	<b>64,094</b>	<b>20,280</b>	<b>84,374</b>				

**Table 4: 2014 Other Species *in vivo* Embryo Production**

Collection data												Transfer Data		
Species	Collections	Total Ova	Total Viable	Ave Ova	Ave Viable	% Viable	Frozen	Fresh	Frozen	Total				
Canine	30	50	20	1.7	0.7	40.0%	0	20	0	20				
	Caprine	100	871	749	8.7	7.5	86.0%	271	478	47	525			
Equine	85	61	54	0.7	0.6	88.5%	3	51	3	54				
	Ovine	88	657	349	7.5	4.0	53.1%	44	305	26	331			
<b>Total</b>	<b>303</b>	<b>1,639</b>	<b>1,172</b>	<b>5.4</b>	<b>3.9</b>	<b>71.5%</b>	<b>318</b>	<b>854</b>	<b>76</b>	<b>930</b>				

**Table 5: 2014 Embryos Exported by Country**

Country	Beef	Rank	Dairy	Rank
Argentina	56		26	
Australia	458	2	442	7
Austria	-		4	
Belgium	-		5	
Brazil	1,314	1	465	6
Canada	357	3	229	9
China	127	8	2,072	1
Colombia	15		227	10
Costa Rica	55		-	
Denmark	-		122	
Dominican Rep.	-		23	
Finland	-		139	
France	-		178	
Germany	121	9	1,851	3
Hungary	-		5	
Ireland	-		214	
Italy	52		139	
Japan	-		1,245	5
Kazakhstan	97	10	25	
Kenya	-		17	
Mexico	143	7	31	
N. Ireland	-		139	
Nepal	-		25	
Netherlands	15		1,492	4
New Zealand	149	6	120	
Pakistan	-		26	
Panama	-		4	
Paraguay	42		82	
Russia	-		1,871	2
Scotland	63		-	
South Africa	60		-	
Spain	-		18	
Sweden	-		38	
Switzerland	-		157	
Thailand	80		79	
United Kingdom	229	4	368	8
Uruguay	205	5	21	
<b>Total Overall</b>	<b>3,638</b>		<b>11,899</b>	<b>15,537</b>

**Table 6: 2014 Embryos Exported by Breed**

Beef		Dairy	
Breed	#	Breed	#
AN	845	HO	11,141
SE	834	JE	472
BN	582	BS	250
KB	362	AY	23
SM	292	GU	13
LM	192		
RB	135		
BR	109		
BM	77		
SG	72		
HH	53		
HP	45		
SS	20		
FL	11		
PZ	6		
XX	3		
<b>Total</b>	<b>3,638</b>		<b>11,899</b>
<b>Overall</b>			<b>15,537</b>

**AETA Data submitted to IETS**

<b>Language</b>	<b>English</b>
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**Table I : Number of embryo collections and embryos collected.**

<b>Year</b>	2014
<b>Embryo Team Name</b>	USA (AETA)
<b>Group</b>	USA (AETA)

<b>Region</b>	<b>N.America</b>	<b>Country</b>	<b>USA</b>
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Species	Type	Total number of		
		Collections	Transferrable Embryos Collected	
Bovine In-vivo derived	Dairy	15217		93460
	Beef & other breeds	31246		218794
Bovine In-vitro produced	All breeds	No. of donor cows	No. of oocytes	No. of transferrable embryos**
	Ovum pickups	39704	762759	193699
	Abattoir*		Not reported	132
Water buffalo <i>Bubalis bubalis</i>	In-vivo derived	NA		NA
Sheep	In-vivo derived	88		349
Goats	In-vivo derived	100		749
Cervids	In-vivo derived	NA		NA
Horses	In-vivo derived	85		54
Swine	In-vivo derived	NA		NA
Others	In-vivo derived	30		20
Water buffalo <i>Bubalis bubalis</i>	In-vitro produced	NA	NA	NA
Sheep	In-vitro produced	NA	NA	NA
Goats	In-vitro produced	NA	NA	NA
Cervids	In-vitro produced	NA	NA	NA
Horses	In-vitro produced	NA	NA	NA
Swine	In-vitro produced	NA	NA	NA
Others	In-vitro produced	NA	NA	NA

Abattoir\* - only record the oocytes and transferrable embryos used in commerce, not for research purposes.

\*\* Only include embryos produced for commerce, not research

\*\*\* An OPU session is considered a collection

Table II : Numbers of embryo transferred and exported.

Species	Type	Total number of			Exports
		Fresh	Frozen		
			Domestic Origin	Foreign origin	
Bovine In-vivo derived	Dairy	38097	29938	NA	11899
	Beef & other breeds	44823	103740	NA	3638
Bovine In-vitro produced	Ovum pickups	64094	20280	NA	NA
	Abattoir*	132	0	NA	NA
	in vitro produced				
Water buffalo <i>Bubalis bubalis</i>	In-vivo derived	NA	NA	NA	NA
Sheep	In-vivo derived	305	26	NA	NA
	In-vivo derived	478	47	NA	199
Goats	In-vivo derived	NA	NA	NA	NA
Cervids	In-vivo derived	NA	NA	NA	NA
Horses	In-vivo derived	51	3	NA	NA
Swine	In-vivo derived	NA	NA	NA	NA
Others	In-vivo derived	20	0	NA	NA
Water buffalo <i>Bubalis bubalis</i>	In-vitro produced	NA	NA	NA	NA
Sheep	In-vitro produced	NA	NA	NA	NA
Goats	In-vitro produced	NA	NA	NA	NA
Cervids	In-vitro produced	NA	NA	NA	NA
Horses	In-vitro produced	NA	NA	NA	NA
Swine	In-vitro produced	NA	NA	NA	NA
Others	In-vitro produced	NA	NA	NA	NA

Abattoir\* - only record the oocytes and transferrable embryos used in commerce, not for research purposes.

**Section A: General ETB Information 2015**

Return form to:  
AETA  
1800 South Oak Street, Suite 100  
Champaign, IL 61820

ETB/Company Name:

IETS Freeze Code:

Contact Person:

Phone No.:

E-Mail:

State in which your ETB is located?

Was your ETB certified for the survey year?

ET is what percentage of your company's total business? (%)

Did your ETB produces or transfer *in vivo* Bovine embryos? (Complete section B)

Did your ETB produces or transfer *in vitro* Bovine embryos? (Complete section C)

Did your ETB produces or transfer embryos from other species? (Complete Section D)

Did your ETB export embryos? (Complete section E)

All AETA Members include in this report

	Name	AETA membership# <sup>1</sup>	Degree	Certified
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Instructions: <sup>1</sup> AETA# is an individuals membership number with the AETA/FASS, not your IETS freezer code for your company.



**Section B: Bovine in vivo Produced Embryos**

Animal Data		Bovine in vivo Produced Embryos							
		Collection data		Transfer data		Manipulated			
Species	Breed type	Semen Type	# of Collections	Total Ova <sup>1</sup>	Frozen	Fresh	Frozen	Biopsied <sup>2</sup>	Bisected <sup>3</sup>
Bovine	Dairy	Non-Sorted							
Bovine	Dairy	Sex-Sorted							
Bovine	Beef	Non-Sorted							
Bovine	Beef	Sex-Sorted							

**Instructions:** 1) Total Ova Collected includes all UFO, Deg and Viable embryos.  
 2) All embryos biopsied either fresh or post thaw.  
 3) Whole embryos bisected, not demi embryos produced.

**Section C:**

Animal Data		in vitro Embryo production Data <sup>1</sup>				Transfer Data <sup>2</sup>		
Species	Breed type	Oocyte Source	# of OPU's	Total Oocytes	Viable Embryos	Frozen	Fresh	Frozen <sup>4</sup>
Bovine	Dairy	OPU						
Bovine	Dairy	Abattoir						
Bovine	Beef	OPU						
Bovine	Beef	Abattoir						

**Instructions:** 1) Only report data for embryo production from your laboratory. !!! Do not report production data if you only perform OPU's and have embryos product by another Laboratory.  
 2) Only report transfers performed by your ETB from an internal or external source.

**Section D: Other species**

<i>in vivo</i> Produced Embryos								
Animal Data	Collection data			Transfer data		Manipulated		
	Species	# of Collections	Total Ova <sup>1</sup>	Frozen	Fresh	Frozen	Biopsied <sup>2</sup>	Bisected <sup>3</sup>
Equine								
Ovine								
Caprine								
Porcine								
Other								

**Instructions:**  
 1) Total Ova Collected includes all UFO, Deg and Viable embryos collected  
 2) All embryos biopsied either fresh or post thaw.  
 3) The number of whole embryos bisected, not demi embryos produced.

**Section E: Export Data**

	Country	Species	Breed Type <sup>1</sup>	Breed Code <sup>2</sup>	# Export
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

<sup>1</sup> Breed Type is Dairy or Beef.  
<sup>2</sup> Please use 2 digit IETS breed code

COMMENTS OR QUESTIONS FOR THE AETA STATS COMMITTEE?