# From ABS to the Farm...Safely

ABS, we pride ourselves in producing and providing the highest quality product in the industry. The key to achieving this goal is multi-faceted and pertains to following strict protocols from start to finish. This article is the first in a series that will discuss the ABS production process and describe how ABS brings top of the line products to producers. The topic of this first article is where the process all begins – the ABS sires and the people that work with them every day.

## **ABS Sire Procedure**

### Arrival at ABS

The production of a healthy product begins before the sire arrives at ABS. Each prospective sire is tested on-farm for the following diseases: IBR, BVDV, Leptospirosis, Johne's Disease, Brucellosis, Tuberculosis, Anaplasmosis, Leukosis, Bluetongue and EHD. After passing these stringent tests, the sire arrives on premises.

On arrival, sires enter the admittance facility, which is located 2 miles from the rest of the ABS facilities. This facility houses approximately 135 animals and upon arrival, all sires are washed, hoof trimmed, treated for any internal and external parasites, given a magnet and physically examined while the bull is in. The bulls' next stop is the quarantine or isolation barn where they are kept for approximately 70 days. During this time, they once again undergo six consecutive weeks of disease testing including: IBR, BVDV, Leptospirosis, Brucellosis, Johne's Disease, Tuberculosis, Anaplasmosis, Leukosis, Bluetongue, EHD, T. fecus, C.F. venerealis and parental verification and testing for recessives (if they are a new or young sire). While the vast majority of dairy sires are housed their entire lives at ABS, some of the sires in the active beef line-up are just brought

at ABS, some of the sires in the active beef line-up are just brought to ABS for collection. A smaller portion of the beef sires become "residents" and will spend several years at ABS. The "non-resident" sires are at the ABS facility for about 160 out of 365 days a year. The length of stay is largely determined by demand, health status and production capabilities of the individual bull. Young sires have a smaller bank of semen collection, so they can be sampled, and once a bull is proven he will typically come back into ABS to make additional inventory.

The beef sires go through the same qualification process, are quarantined on arrival, and then are collected at the admittance facility. Those sires which are globally qualified are collected in an internationally qualified facility once they have passed their quarantine period. ABS has several barns of varying health status where semen can be produced to the health requirements of various countries. The majority of ABS sires are housed in the TLC or Heritage Hall barns with a very small portion housed in the European Union (EU) qualified housing.

A major portion of the A.I. facility is devoted to collecting dairy bulls, the research and understanding that has been gained from this busi-

ness makes ABS the premier semen producer in the world. As a point of interest, we will describe the process a dairy sire would go through.

When young dairy sires have reached a certain age and reproductive development (this varies on a sire to sire basis), 5,000 to 10,000 units of semen are collected for distribution. These sires are housed in the ABS Genetic Venture (GV) Barn, a barn that is home to 113 bulls. After they have produced their allotted amount of PT product, the young dairy sires housed at ABS are moved from their individual housing in the Genetic Venture Barn to group housing in rearing facility. The sires are housed in this facility for 3-4 years, while they are "in waiting" for their daughters to be born and evaluated, a process which ultimately generates their first proof data.

During young sires' time in the rearing facility, they are growing and developing. They are not collected here, but they are monitored daily and their pens are cleaned every other day. This facility itself holds 300-400 bulls and contains group housing and individual housing. This herd is health tested twice a year for Tuberculosis, Brucellosis, Leukosis, IBR and Johne's Disease. Usually, the sires are housed in groups of 7-8, but also there are modular pens for those sires who have left group housing for miscellaneous reasons.

Throughout their time of collection in the GV barn and their stay in the rearing facility, young dairy sires receive a ration of corn silage, alfalfa/grass haylage, vitamin and mineral packs. The younger sires up to 21 months of age are fed to gain 2 pounds a day. After 21 months, they are fed to gain 1.5 pounds a day until they are 36 months of age, and then they are fed to gain 1 pound a day until they are 48-50 months of age. All sires are under 24-hour surveillance in these facilities.



## The Next Step – Making Semen

Beef sires are collected in four locations at ABS DeForest: Holstein Hilton, Genetic Venture, Heritage Hall and TLC (see sidebar for more details about ABS facilities). The collection for all sires in these barns starts at 7 am and concludes at noon, and each barn has two collection rings. Each sire's collection schedule differs based on his production, market demand and collection schedule. For instance, some

# **Providing a Healthy Product**

high demand bulls are collected several days a week, while others are only collected once a week. However, one of the primary determinates in the frequency of collection is the bull's physical capabilities. The sires in these production facilities are handled more often than the sires in the rearing facility. Their individual stalls or pens are bedded twice each day in order to ensure cleanliness and dryness. In addition, each bull is washed once a month, clipped once a year,



checked or hoof trimmed three times a year and body condition scored quarterly. They also undergo bi-annual herd health testing which is described in more detail below.

The ration for sires in the production barns differs a bit from the one they received in the rearing facilities. These sires are not fed a Total Mixed Ration, but instead receive a mixture of corn silage, alfalfa/ grass haylage and minerals. These facilities are also under 24-hour surveillance.

# **ABS Protocol - Ensuring Safety and Quality**

**Biosecurity** Procedure

ABS uses five production sites around the world including, Australia, Brazil, Canada, the United Kingdom and the United States. Each of these locations meet their individual country's Artificial Insemination (A.I.) and Certified Semen Services (CSS) standards and are also set up to export product internationally.



The ABS biosecurity standards are strictly enforced at all of these ABS production sites and are the best in the industry. In fact, ABS was recognized for their protocol and procedures in the Journal of the American Veterinary Medical Association. The ultimate goal of these strict measures is to guard against incursion and spread of disease

within the ABS bull population, which allows ABS to provide beef producers with the products that meet our high biosecurity standards and the widest access to sires in the ABS line-up.

For this reason, each bull barn is considered a separate herd and there is little movement of bulls from barn to barn. All bull herds are tested biannually to meet CSS protocol and other international health testing requirements. ABS bulls are tested for the following diseases: Tuberculosis, Brucellosis, Campylobacter, Trichomoniasis, Leptospirosis, Johne's Disease, Leukosis, IBR, Blue Tongue and EHD.

In addition, ABS staff use only ABS vehicles when moving on premise and only disinfected vehicles are allowed to pass the gates of either the rearing or production barns. Also, these staff members are required to wear freshly laundered clothing and shoes when entering each facility and

## **Holstein Hilton**

- Built in 1964
- Holds 65 bull
- All bulls are export (EU) qualified
- 2 collection rings
- Fully air-conditioned
- Indoor Exercise Track

#### **Genetic Venture**

- Built in 1974
- Houses 113 bulls
- Outdoor & indoor collection ring
- Primary collection barn for young sires

#### **Heritage Hall**

- Built in 1982
- Home to 104 bulls
- Has observation deck
- Outdoor & indoor collection ring
- Current home of 29AN1523 NEW DESIGN 878, 29AN1640 IN FOCUS, 29AN1520 N BAR PRIMETIME, 29AN1619 MORGANS DIRECTION, 29AR0183 ABOVE AND BEYOND, 29CH0199 DOC SILVER and 29SM0373 DREAM ON

#### TLC

- Houses 25 Bulls
- Home to 29AN1556 LEAD ON, 29AN1574 OBJECTIVE,
  29AN1641 PRECISION 1023,
  29AN1658 POWER ALLIANCE,
  29AR0196 CHEYENNE, 29AR0199
  ROMEO and 29CH0194
  GAIN AND GRADE

all livestock staff equipment is disinfected any time it was in contact with the bulls.

Visitors to ABS are limited access to the bulls as a biosecurity measure, no one is allowed direct access to the bulls. This is for the protection of the herd at ABS and ensures the highest quality product offering to beef producers.



## Safety and Dedication

One of the most important parts of the production process is the people who make it all happen - the ABS Livestock staff. Many of these individuals are long-time ABS employees. For example, the current Wisconsin Livestock Department consists of 34 men and women, who on average have been with the company for 19 years. Each of these individuals undergoes training in order to handle ABS bulls, so that every handler provides the same high level of care to each bull every day. In order to ensure their safety, handlers also follow strict procedures for semen collection and other systematic ABS processes, which are all outlined in the ABS Livestock Manual.



Along with knowing these standards, ABS livestock handlers use Australian Healers to assist them with pen cleaning and bull movement at the ABS DeForest rearing (younger dairy bulls) facility. ABS began utilizing these dogs in the mid 1970s to further ensure employee safety. The current safety rule for the rearing facility outlines that two men and two dogs are required to move bulls from pen to pen. A typical day for these ABS staff members begins at 4 am when bulls are bedded and fed, and the collection area is prepared for the day's collection schedule. Bull collection begins at 7 am and concludes between 11 am and noon. After collection, routine bull maintenance including hoof trimming, picturing, washing, clipping, feeding, bedding and veterinarian work occur. The production day shift officially concludes at 3 pm at which time the Surveillance Night Shift begins and these individuals conduct outside facility rounds, maintain surveillance, remove manure and bed barns.

The ABS livestock staff collects up to 75 different bulls per day, which equates to about 200 different bulls per week. An average young bull (11-16 months in age) will produce 250 units per day, while an average mature bull will produce 750-1000 units per day. To ensure product availability and maintain bull care, the Livestock staff care for and collect the bulls 365 days a year. Their dedication and expert care has not only helped ABS meet the growing needs of beef and dairy producers around the world, but also has produced breed registration leaders like 29AN1413 EXT, 29AN1523 NEW DESIGN 878, 29AR0186 CHEROKEE CANYON and 29SM0373 DREAM ON.

# **Providing a Healthy Product**

This article detailed the ABS bull handling and production processes and its role in providing a healthy, high quality product to beef producers. As mentioned above, this is the first in a series that will discuss the ABS production process in the Breeders Journal. The next article will showcase the laboratory processing component of the ABS production equation.



