

## Managing Profitable Mixed Herds

Though the practice seemed almost taboo years ago, it is becoming increasingly common to see brown cows, gray cows, red and whites and black and whites comingled in dairy herds across the country.

With this practice come challenges. Facilities may need to be altered to milk and house multiple breeds, newborn calves may need to be cared for differently and herd management may need to be changed.

Fortunately, many dairy producers who milk Jerseys and another breed of dairy cow have found the challenges to be few and the rewards great.

Those who wondered if the little brown cow would be knocked around by her peers have found that she holds her own at the feed trough and in the milk pail. They have discovered that her other attributes—like fewer feet and leg problems, a longer life and more calvings—have also improved their bottom lines.

In this breeder roundtable, the *Jersey Journal* touches on some of the basics of milking multiple breeds. The participants are from across the country, milk in a variety of operations and raise Ayrshires, Brown Swiss, Guernseys, Milking Shorthorns and Holsteins alongside their Registered Jerseys.


### Featured Herds

**Den-Kel Jerseys, Byron, N.Y.** Den-Kel Jerseys is owned and operated by Kip Keller and Robin Denniston-Keller. The couple milks 85 Jerseys and 15 Holsteins. The fully-registered herd has a December 2007 rolling herd average of 20,350M, 1,018F and 794P on the Jerseys and 23,453M, 1,008F and 797P on the Holsteins. This past year, Den-Kel Jerseys was ranked eighth in the nation for milk, ninth for protein and 10th for fat production with an AJCA lactation average of 23,431M, 1,102F and 854P on 62 lactations. Den-Kel milks 15 Excellent and 53 Very Good cows and has an average appraisal of Very Good 83.8% (October 2007). The REAP herd ships milk in the Northeast Federal Milk Marketing Order (FMMO), which has multiple component pricing (MCP). The herd is currently ranked 17th in the nation for herd-average JPI, with an average JPI of +100 on 74 cows.

**Elmore Jerseys, Elizabethtown, Ky.** Elmore Jerseys is owned and operated by Pat and Stacy Elmore and their children, Logan and Jordan. Two part-time employees help with the operation of the fully-registered herd, which includes 20-25 Jersey cows and an equal number of Brown Swiss cows. The herd had a December 2007 rolling herd average of 17,894M and has components that average 4.7-5.1%F and 3.6-3.8%P during the year. This past year, the top-producing Jersey produced 23,039M and the top Swiss made 30,247M. Elmore Jerseys ships milk in the Southeast FMMO, which is a fluid-milk market.

**Lavon Farms, Plano, Texas.** Lavon Farms is a limited partnership based in Texas between brothers, Todd and Jonathan Moore. The fully-registered REAP herd milks 120 Guernseys, 40 Jerseys and three Milking Shorthorns. It is nationally recognized for its Guernseys. The rolling herd average is about 14,000M, with components of 4.2%F and 3.2%P. Production among all breeds is similar. Lavon Farms processes its own line (Lucky Layla Farms) of cheese, drinkable yogurt and butter using about 15% of its milk. The yogurt and cheeses have won awards in competitions sponsored by the American Cheese Society (ACS) and World Dairy Expo. This past year, the yogurt was named “America’s Best Yogurt” by the ACS. Lavon Farms plans to expand its product line to include bottled milk. The farm is in the Southwest FMMO and receives MCP for the balance of its milk.

**Milk-n-More Jerseys, Cecil, Wis.** Milk-n-More Jerseys is owned and operated by Ron and Nicolle Wussow and their children, Kaila and Colin. The farm has one full-time employee for feeding and maintenance work and six part-time employees that help with milking, clipping, showing and harvesting. The herd is 85 Holstein cows and 35 Jersey cows, with a December 2007 rolling herd average of 32,844M, 1,140F and 946P on the Holsteins and 24,842M, 1,179F and 841P on the Jerseys. The Jersey herd was high herd in the state for production and dollar value this past year while the Holstein herd was tops for production and third for dollar value. The Jersey herd is fully-registered and about 10% of the top Holstein cow families are registered. The family is active



Jersey heifers hold their own at the feedbunk with their Brown Swiss herdmates at the Elmore Dairy in Kentucky. Dairy producers need not worry that the Jersey will go hungry when she's competing with larger peers for feed.

in showing and recently exhibited the Premier Performance Cow of the All American Junior Jersey Show and Reserve Junior Best Three Females at the All American Jersey Show this past November. The family also showed the Reserve Junior Champion of The 2005 All American Jersey Show. The REAP herd ships milk to Trega Foods, a cheese plant, and receives MCP through the Upper Midwest FMMO.

**Tollenaar Jerseys, Elk Grove, Calif.** Tollenaar Jerseys is a partnership between Cornelius and Jannie Tollenaar and Jon and Tami Tollenaar. Jon and Tami are responsible for management of the fully-registered herd, which includes 700 Holstein cows, 150 Jersey cows and five Ayrshire cows. The farm and dairy is also operated with the help of 11 full-time employees. The herd averages 25,034 lbs. of energy corrected milk (ECM) on the Holsteins and 20,212 lbs. ECM on the Jerseys. The REAP herd was fifth in the nation for fat production in 2006 with an AJCA lactation average of 21,452M, 1,264F and 755P on 54 lactations. Tollenaar Jerseys is in the California Fat and Solids Non-Fat (SNF) Market and ships its milk to the Hilmar Cheese Company, which also awards a market basket premium for higher-component milk. Tollenaar Jerseys is ranked first in the nation for JPI, with an average JPI of +132. This past summer, Jon and Tami were awarded the AJCA Young Jersey Breeder award.

#### Jersey Involvement

*How did your involvement with Jerseys begin? Did you start with another breed and then add Jerseys to the herd? Or was it the other way around?*

**Denniston-Keller:** Both of us started with Holsteins. We were mentored by Paul and Melanie Chittenden of Dutch Hollow Farm—Kip on trucking trips to the National Heifer Sale in Idaho and the Ogston Sale and Robin during afternoon milkings at Dutch Hollow.

**Elmore:** We were raising beef cattle and purchased our first Jersey in 1996 as a show heifer for a 4-H project. As our Jersey numbers grew, we built a dairy in 2005 and then added the Swiss after construction was complete.

**Moore:** We were milking all Guernseys until we expanded the herd in 1990. Since there wasn't much for Guernseys, we had a choice to add either Holsteins or Jerseys. We opted for Jerseys

and purchased 20 bred heifers from Brody Koon in Brashear, Texas. The present herd has grown from that group and some higher profile animals that we have selected at sales for the embryo transfer program.

**Tollenaar:** We were 100% Holsteins until we began shipping to Hilmar Cheese in 2002. Jerseys were added to capture a higher premium for our milk.

**Wussow:** We were both raised on Holstein farms and got our start with Holsteins. We bought a Jersey calf for Kaila for her first birthday 10 years ago because we wanted something different for her. We had tried Brown Swiss and Ayrshires for Colin, but we have since changed his herd to Jersey as well.

*If you started with another breed, what made you decide to add Jerseys to the herd? Did you notice a difference in the milk check when Jerseys were added to the herd? Do you receive premiums for your milk? If so, what are they for and how much do they typically represent?*

**Denniston-Keller:** The milk from both herds is co-mingled. We receive a protein premium from our milk cooperative and milk quality premiums as well. Last year was a perfect example of the benefits of Jerseys. Though the milk market was poor, we cash flowed because of our component levels and the profitability of our Jerseys.

**Elmore:** Since we started with Jerseys and then added Swiss a few at a time, there was no real change in the milk check. We receive premiums for fat and somatic cell counts under 300,000, which we consistently earn.

**Moore:** Since we already had Guernseys, we didn't notice a difference in the milk check. However, we did notice an improvement in sustainability, reproductive efficiency and longevity when we added the Jerseys to the herd. Right now, we have Jersey heifers coming out of our ears and have doubled our herd size since 2003. This is due to the breed's reproductive efficiency and the fact that so many of the Jerseys had heifers this past year.

**Tollenaar:** To increase our cheese yield and earn a higher premium, we included Jerseys in the herd. Because California pays on fat and SNF, our pay-price increased when we incorporated

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Robin Denniston-Keller and Kip Keller operate Den-Kel Jerseys in Byron, N.Y. The herd, ranked eighth in the nation last year for milk production, includes 85 Jersey and 15 Holstein cows. The couple was presented with the AJCA Young Jersey Breeder Award in 1996.



The Elmore—Logan, Jordan, Pat and Stacy—started dairying in 1996 with the purchase of a Jersey heifer as a 4-H project. Today, the family milks 20-25 Jerseys and an equal number of Brown Swiss in Elizabethtown, Ky.

## MIXED HERD ROUNDTABLE

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the Jerseys and we received premiums on top of the pay-price. With the constantly changing milk market in California, it is hard to quantify the premium. But, since California has changed the whey portion of the cheese pricing formula, there will be additional incentives in the future.

**Wussow:** When Kaila's first heifer calved and we saw how much milk she gave, we started purchasing more Jerseys. At the time, they were a good buy because not many other producers were looking for them. It just amazed us how the Jerseys could hold their own at the feed bunk and were able to milk so much. We also bought a cow that produced the Reserve Junior Champion at the 2005 All American Jersey Show and that began the showing enterprise. We receive premiums for quality, but the plant stopped paying a protein premium several years ago. Since the majority of the herd is Holstein, we did not notice a difference in the milk check when Jerseys were added.

### Milking Cow Facilities

*Describe your milking facilities. Did you have to make changes in the milking facilities to accommodate multiple breeds? Are there challenges in milking different breeds? If so, how have you overcome the obstacles?*

**Denniston-Keller:** We milk in a double-seven herringbone parlor. The existing parlor was sized for Holsteins. Because of this, it sometimes helps to have a large Holstein in front of a first-calf Jersey heifer.

**Elmore:** We milk in a six-stall, elevated flat parlor. The original facility was designed to accommodate multiple breeds, so there are no challenges milking the two breeds.

**Moore:** We milk in a double-six herringbone parlor. We didn't change the facilities when we added the Jerseys. However, when we build a new parlor, we will use an indexing system for stall size that accommodates the different sizes of the breeds. Currently we group the breeds separately to avoid size issues. When the Jersey heifers are into their second lactation, there are no size issues among the breeds.

**Tollenaar:** We milk in a double-six side-opening parlor. We did not need to make any changes or modifications when

incorporating the mixed breeds.

**Wussow:** All milk cows are housed in tie-stalls. We milk three times a day with six automatic take-offs. The older part of the barn has smaller stalls, which are used for the Jerseys. When we added onto the milking barn in 2005, we made larger stalls for the Holsteins.

*Describe your housing facilities. Do you have different-sized stalls for different breeds? Do you have different-sized headlocks? Did you have to make changes to accommodate multiple breeds? Do you group breeds together?*

**Denniston-Keller:** All cows are run together and housed in freestalls bedded with sand. All stalls are the same size. The existing facility was built for Holsteins, so the Jerseys have plenty of space. We use sand as a "brisket board" to keep the Jerseys pushed back in the stalls.

**Elmore:** All the cows are run together and housed in a pack barn, so stall sizing is not a consideration. We do not have head locks.

**Moore:** Cows are housed on dry lot pasture and grouped by breed. Both of the Channel Islands breeds perform well in the extreme heat and cold we get here in the central blacklands of Texas, about 20 miles north of Dallas.

**Tollenaar:** We house our cows in free-stall barns with waterbeds. All of our housing areas have the same sized stalls and headlocks. No changes were made to accommodate the Jerseys. The breeds are intermixed and grouped by stage of lactation and age. We try to minimize string changes as much as possible.

**Wussow:** We have 109 tie stalls and two pens. Though cows are tied in the same barn, they go outside at different times to minimize the potential for injury from fighting. Dry cows and heifers down to pre-breeding are on pasture as often as possible and housed in three-sided barns. Both breeds are raised together. We have headlocks for the heifers.

*Describe the ration. What are you feeding and in what amounts? Are the rations different for each breed? Have you noticed differences in nutritional requirements among the breeds or how they convert feed to milk? How much does it typically cost to feed each cow by breed?*

**Denniston-Keller:** We feed a total mixed ration (TMR) to both



Todd and Deanna Moore and their children, Madison and Mason. Lavon Farms, a mixed herd of Jerseys and Guernseys, is operated by Todd and his brother, Jonathan. The farm produces its own line of dairy products using the Lucky Layla Farm label and has been recognized by the American Cheese Society for its cheeses.



Jon and Tami Tollenaar manage Tollenaar Jerseys in partnership with Jon's parents, Cornelius and Jannie. The herd of 700 Holstein, 150 Jersey and five Ayrshire cows ships milk to the Hilmar Cheese Company and added Jerseys to the mix seven years ago to capitalize on the company's market basket premiums for higher-component milk.

breeds. Cows are fed 21.07 lbs. corn silage, 7.04 lbs. haylage, 2.76 lbs. wheat straw, 4.26 lbs. corn meal and 13.89 lbs. protein mix. The protein mix contains soy, canola, distillers, blood meal and vitamins and minerals. Our cost is \$4.24 per cow per day.

**Elmore:** We feed an 18% protein grain mix at the rate of 22 lbs. per head, with free choice grass hay and alfalfa balage. The ration is the same for both breeds. There are no noticeable differences in nutritional requirements between the breeds or how they convert milk to feed. Since feed prices are constantly changing, it is difficult to establish a cost per head, but the grain mix hovers around \$2.50 per cow per day.

**Moore:** We feed a modified TMR with an alfalfa base. Currently we are feeding 10 lbs. alfalfa, 8 lbs. grass hay and 25 lbs. textured feed concentrate. The concentrate is a 45% corn base and a mix of cottonseed, molasses and concentrated pellets. The pellets are made of soybean hulls, wheat middlings and minerals. Cows are fed twice a day and also have access to wheat pasture in the winter and sudan pasture and Bermuda grass in the summer. All breeds are fed the same ration. The feed cost is \$4.50 per cow per day. All feed is purchased so this includes the cost of forages.

**Tollenaar:** We feed a TMR using a twin vertical mixing truck. Currently our ration consists of 40% forage and 60% concentrates. We feed two rations to the milking herd. One ration is fed to cows in their third lactation or greater and the second ration is fed to first and second lactation cows and fresh cows. With escalating feed costs, changes to the ration are ongoing to keep costs in check. Currently our feed costs are \$4.25 per cow per day.

**Wussow:** We feed a TMR to all milking cows. The only difference is that we go past the Jerseys with the feed cart a little faster. We feed 2 lbs. hay, 1.5 lbs. wheat straw, 15.3 lbs. ground corn, 13 lbs. supplement, 51 lbs. haylage and 33 lbs. corn silage (remember that a majority of the herd is Holstein). The supplement contains hipro soybean meal, amino plus, whole cottonseed, soy hulls, roasted soybeans, corn gluten meal, blood meal, bicarb and yeast. We also add a direct-fed microbial to one batch a day.

We have not noticed any nutritional differences in the lactating diets. The Jerseys are able to convert feed to milk more efficiently, which is proven by the pounds of milk they are able to produce. Our estimated feed cost right now is \$5.23 per hundredweight of milk produced, which is about \$1.50 more than in previous years. This is not breed specific because they are all fed the same rations, but at different amounts.

### Raising Calves

*Describe your procedures for caring for newborn calves. Do you care for the breeds differently? Do you feed the same milk replacer to each breed? How much do calves of each breed typically get?*

**Denniston-Keller:** Newborn Jersey calves are given 2-3 quarts of colostrum, (four quarts for Holsteins), a First Defense Bolus and have their navels dipped with 7% tincture of iodine. In winter, calves wear a calf blanket until weaning. All calves are raised on Land O' Lakes Jersey Blend milk replacer. It is expensive, but they seem to have a stronger immune system with this replacer versus other products.

**Elmore:** All newborn calves are taken to individual stalls in a nursery and given synthetic colostrum with an hour of birth. Their feet and navels are dipped in an iodine solution at this time as well. About six hours after birth, they are again fed the synthetic colostrum and given an IgG booster. We use an all-milk replacer for both breeds, with the Jerseys receiving a four-quart bottle twice a day and the Swiss receiving two four-quart bottles twice a day.

**Moore:** All cows calve in a pasture that is set aside for close-up cows and springers. After the calves are born, their navels are dipped in 7% tincture of iodine. We milk the cow, test the colostrum for quality and then pasteurize the colostrum if the quality is good.

Calves are fed and then taken to individual hutches. They are tattooed, ear-tagged and given a blackleg vaccine a few days after birth.

**Tollenaar:** The navel cords of all newborn calves are dipped with tincture of iodine. Colostrum, which has been pasteurized by a colostrum Dari-Tech unit, is fed twice a day for three days. All calves are then fed twice a day at the rate of one gallon of milk per day. They are currently fed 22/22 Jersey Advantage non-medicated milk replacer. We are in the process of installing a calf milk pasteurizer to replace the powdered milk. Newborn calves are also tagged with American ID tags and branded.

**Wussow:** Most of our calves are born under supervision since someone is in the barn from 6:30 a.m. to 7:00 p.m. and then again from 10:30 p.m. to 3:00 a.m. As soon as a calf is born, it is immediately taken to the milkhouse to be washed off and given Calf-Guard. In the summer, it goes to an individual hutch immediately. It is fed colostrum and then given an Ecolizer with C vaccine. In the winter, it is put in a calf warmer. The cow is given warm water with vitamins and minerals, calcium under the skin, calcium by a tube (if needed) and milked.

We wait about 30 minutes to feed colostrum. Bulls are given colostrum from the dam and heifers are fed a colostrum replacer mixed with 4 cups of water. Jerseys receive 2 quarts and Holsteins receive 4 quarts. Heifer calves are given Ecolizer with C vaccine after they finish their colostrum. The next day they are given a Nasalgen vaccine. About two months ago, we switched from milk replacer to pasteurized milk. We are extremely happy with the results and wish we had done this sooner.

*Do you notice differences between the breeds at birth? Are*

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Nicolle, Kaila, Colin and Ron Wussow operate Milk-n-More Jerseys. One of the family's hobbies is showing Jerseys, which were first added to the Holstein herd as a 4-H project for Kaila. Kaila is at the halter of Milk-n-More Action Nina, Supreme Junior Champion of the North East Wisconsin High Protein Show, and Ron holds Michael Centurion Darla, 2007 Reserve Junior All American Senior Three-Year-Old and Overall Premier Performance Winner.

## Mixed Herd Roundtable

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*there special challenges or considerations for either breed?*

**Denniston-Keller:** Livability and calving ease go hand-in-hand. In general, the Jerseys seem to have a jump start on the Holsteins.

**Elmore:** There is a noticeable difference between the breeds as newborns. The Jersey calves are more aggressive in learning to latch onto a bottle. For this reason, they are given a nipple with a smaller opening to guard against aspiration that could cause pneumonia. The Swiss calves are more sluggish and have more problems learning to latch onto the bottle. Because of this, we may have to work with them several times before they consume a full bottle. Tube feeding, though, is used only as a last resort.

**Moore:** There are no differences among the breeds.

**Tollenaar:** Jersey calves are taken away from the dam right after calving. The only difference we notice among the breeds is that Jerseys tend to be a little more challenging to care for during the first week. By taking calves away quickly, they adjust to the bottle and nipple more quickly.

**Wussow:** Jersey calves tend to be more sensitive than Holstein calves. We usually put two winter jackets on the Jerseys to help them regulate their body temperatures. We do not hesitate to bring one back to the warmer if it is necessary. As well, Jersey calves are usually more aggressive with eating than their Holstein herdmates. We feed calves three times a day. Jerseys are fed three pints of milk and Holsteins are fed four pints at each feeding until they are about two weeks old. Then, the Jerseys get a gallon and the Holsteins get two gallons of milk at each feeding.

*When do you begin feeding grain or a calf starter? Do you feed the same*

Jersey and Guernsey heifers at Lavon Farms are raised together until breeding age. They are served by respective bulls and then regrouped when confirmed pregnant and raised together until calving. Cows are grouped separately because the Jerseys tend to eat more than their share of the milking cow ration.

*ration to each breed? How much do calves of each breed typically eat?*

**Denniston-Keller:** We begin feeding starter at three days. We use shallow dishes rather than deep calf buckets to get new calves familiar with eating and drinking. After a couple of weeks, we switch to traditional hutch pails. Free choice water is given to all calves.

**Elmore:** For both breeds, we begin feeding free choice 23% calf starter around one week-of-age and offer water at two weeks-of-age. As they grow, the rate is adjusted according to weight. By the time they are weaned, they are eating 6-10 lbs. of calf starter per day. At weaning, they are given an 18% grower along with free choice hay.

**Moore:** All breeds are fed the same. We begin offering water and calf starter at four days. All calves are weaned at eight weeks and moved to groups at 10 weeks. Breeds are then grouped together until breeding age. They are all fed calf starter until they are six months old and then they are transitioned to a dry cow pellet.

**Tollenaar:** All calves are fed calf starter beginning on day three. All breeds receive the same amount. After 30 days, they are introduced to a TMR, which they will stay on until they are six months-of-age.

**Wussow:** We do not push starter intake until the calves are about 4 weeks old. We offer it right away, but typically they do not eat much of it because of the volume of milk they are consuming.

*Are calves raised in the same facilities? Are they grouped together? If so, are they grouped by age or by size and/or weight?*

**Denniston-Keller:** Calves are initially started in individual hutches. After weaning, they are moved into small group pens of 2-6 calves, depending on the number being weaned. The groups are housed in super hutches and continue to

get the calf grain they are used to.

**Elmore:** As calves are weaned, they are transitioned to group pens with 6-8 head in each pen. When they weigh about 500 lbs., they are moved to an open lot and offered free choice hay and grain twice a day. The breeds are segregated until they are placed in the open lot; then they are grouped according to size and weight.

**Moore:** Calves are grouped together on pasture until breeding age. As mentioned earlier, they are transitioned from calf starter to a dry cow pellet at six months-of-age. The older they get, the less we feed them. When they reach breeding age, they are eating about 3 lbs. of dry cow pellets a day. In spite of this, we have fantastic growth rates and terrific conception rates, perhaps because we're not breeding fat heifers. When they are confirmed pregnant, we increase the amount of feed in the ration.

**Tollenaar:** Calves are raised in individual hutches and/or pens. Once they leave the individual housing, calves are grouped by age in open pens. All breeds are mixed together.

**Wussow:** Calves are raised in individual hutches until they are weaned. We wean calves in groups of 3-4 head. Holsteins are weaned by 7 weeks; Jerseys are weaned by 10 weeks. They are usually eating 4-5 lbs. of starter before we wean them. Once they are entirely off milk, we wait a week and then move them to the super hutches according to their size. They are given the same grain and some grassy hay until they are 6 months old. We then introduce them slowly to a heifer TMR and then they receive a 100% TMR. The heifers that are going to be shown are not given a TMR; they stay on the grass hay. We always move the Jerseys in groups with the Holsteins and will not put a single Jersey in with a group of Holsteins.

### Raising Heifers and Springers

*When do you begin breeding heifers and what are these decisions based on?*

**Denniston-Keller:** We begin to breed heifers when they reach 500 lbs.

**Elmore:** Breeding dates are based primarily on age, with a target calving age of 24 months-of-age.

**Moore:** We begin breeding all heifers at 14-16 months-of-age.

**Tollenaar:** Holstein heifers are bred at 12 months-of-age. Jersey heifers are bred as early as 10 months-of-age. Size is considered when heifers are sorted into the breeding pens.

**Wussow:** With the Holsteins, we begin breeding heifers at 12 months-of-age because we are implanting Jersey embryos

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in many of them and they calve so much easier with a small calf. We do watch for size, but typically our heifers are larger than they need to be, so we make sure we wait for the 12 months time frame. With the Jerseys, we wait to begin breeding heifers until they are 14-15 months old.

*Do you breed heifers artificially or with a herd sire? What are your requirements for service sires for your Jersey heifers? Are these requirements different than for the other breeds?*

**Denniston-Keller:** Heifers are first serviced artificially and then with a herd sire for second-plus services. We use a Jersey bull (with brothers in A.I.) to catch open heifers. Both Holstein heifers and Jersey heifers are grouped together. The dams of J1 heifers tend to calve without trouble and perform well as milk cows in the herd.

**Elmore:** All heifers are A.I. bred. Jersey heifers are bred for type and fed for production. Swiss heifers are bred about 50% for type and 50% for production.

**Moore:** Because we are short of help, we currently use a herd bull to breed all heifers. Jersey heifers are bred with a

Jersey bull and Guernsey heifers with a Guernsey bull. We plan to resume breeding artificially with sexed semen when labor becomes available.

**Tollenaar:** All Jersey heifers are bred artificially to the top 10 LNMS (lifetime net merit dollars) bulls that excel in health traits. Once confirmed pregnant, they are put in a pen with a herd sire that is awaiting an official proof. We currently have one Jersey bull and two Holstein bulls that are awaiting proofs. We use the same respective breed criteria for the Holstein and Ayrshire heifers.

**Wussow:** We breed 100% A.I. for cows and heifers alike. We try to breed functional type cows that stay in the herd and watch for prominent cow families on our service sires. We do not put a lot of emphasis on milk pounds because we manage our cows to get milk from them. However, we do use sires that the A.I. studs have requested on the high JPI cows.

*Are heifers of different breeds housed in the same facilities? Describe the facilities and the ration.*

**Denniston-Keller:** Both breeds are housed in the same facility on a bedded pack. Although not ideal, an old dairy barn serves as our heifer facility. Heifers are fed

a ration of haylage and corn silage.

**Elmore:** Both breeds are housed in the same facility—an open lot with shelter. They are given a 12% maintenance grain with free choice hay and balage.

**Moore:** All heifers are raised together on pasture and then separated by breed when they are of breeding age. After they are confirmed pregnant, they return to the same mixed groups until they calve.

**Tollenaar:** Jersey heifers are separated from Holsteins at breeding age and are put into different breeding pens. The TMR is the same for all breeds.




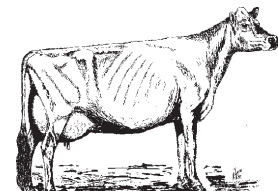
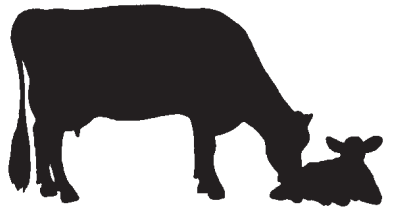

**Wussow:** Heifers are housed together in three-sided barns and on pasture. The ration consists of dry hay, a little haylage, corn silage and minerals and vitamins.

*Describe your protocol for close-up springers. Are different breeds handled differently? Are there special challenges or considerations for either breed?*

**Denniston-Keller:** We have one springer group that is comprised of both heifers and mature cows. Cows in their second and greater lactations get a Bovikalc calcium bolus at calving. The Holsteins run about 10% retained placentas and the Jerseys run less than 1%.

**Elmore:** All close-up springers are

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 <h1 style="margin: 0;">Iowa Jersey Cattle Club</h1> <p style="margin: 0;">Secretary: Jennifer Zumbach, 3371 227<sup>th</sup> Ave. Hopkinton, IA 52237 563/580-8852                  President: Jeff Holtz, 319/652-4480                  AJCA-NAJ Area Representative: Leah Johnson, 614/296-3621</p> 		
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 <h2 style="text-align: center;">Hei-Bri Jerseys</h2> <p style="text-align: center;">Old fashion values                  with a modern focus.</p> <p style="text-align: center;"><b>Brian and Heidi Lantzky</b>                  21575 245<sup>th</sup> Street                  Hawkeye, Iowa 52147</p> <p>563/429-2000 home • 563/379-1372 cell                  heibri@iowatelecom.net email</p>		

## Mixed Herd Roundtable

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moved to a lot where they can be monitored more closely and then moved inside at calving.

**Moore:** We work closely with a nutritionist to bring close-up heifers up-to-speed with the milking cow ration. Four weeks prior to calving, we eliminate the pasture and feed high quality hay and a dry cow pellet. They also are fed 2 lbs. of the milking cow TMR.

**Tollenaar:** Close-up springers are brought to the close-up pen approximately 24 days prior to calving. All breeds are housed together in a close-up pen; there are no special considerations for any breed.

**Wussow:** We bring springers into the pre-fresh stalls about 3 weeks before freshening. All are given calcium under the skin. We handle springers of each breed similarly unless a Holstein springer is carrying her own calf. Then, we may need to assist with the birth.

### Managing Milking Cows

*Are cows bred back at the same time or are there differences among the breeds? What are your conception rates for the different breeds? Are cows bred artificially or by natural service? Do you use young sires and if so are the*

*breeding rates similar for the different breeds? What are your requirements for service sires for your Jersey cows?*

**Denniston-Keller:** Our voluntary waiting period (VWP) is anytime after 40 days-in-milk. The VWP on our first-calf Jersey heifers can be as long as 90 days because of their age at calving. For our herd, 50-70% of the cows are currently used as recipients. All cows are bred A.I. or used as recipients. Young sires are used more heavily on the Jerseys, partly because we are using our own A.I. young sires. Production and functional type are requirements for service sires and we are not willing to sacrifice production for show type.

**Elmore:** Both breeds are bred back around 45 days after calving. Conception rates for both breeds are about 70-75%. Conception rates drop during the summer due to extreme heat. Though the Swiss seem to tolerate heat better, they show fewer heat signs, making detection more difficult. We use A.I. sires for both breeds and then a herd bull for clean-up on problem breeders after the second service. We use a Swiss bull for the Swiss cows and a Jersey bull for the Jersey cows and use young sires for about 20% of the Jersey matings. We breed for improved feet and legs, udder width, udder cleft and teat placement.

**Moore:** All cows are bred back at 60

days after calving. However, we have been able to breed back some of the Jerseys as early as 40 days after calving. When it comes to reproductive efficiency, the Jersey is the best of any breed. Our calving interval for the Jerseys is 13 months and for the Guernseys is 15 months. We breed all cows artificially. In the past, we focused on type, so the herd has a solid functional-type base. We are now breeding production back into the herd, concentrating on production-oriented service sires for the next generation.

**Tollenaar:** All cows are bred artificially on natural heats based on the Afi computer system, which measures milk production and cow activity. Conception rates run similarly among the breeds. More variance in conception is seen on the age of the animal, rather than the breed. We use proven sires for first services on all cows and then incorporate 20% young sires on the remaining services. Breeding decisions are based mostly on genetic merit of the animal and the service sire. Service sires must excel in LNMS, with additional emphasis put on expected future inbreeding (EFI), productive life (PL), somatic cell score (SCS) and daughter pregnancy rate (DPR).

**Wussow:** Cows are bred back at the same time regardless of breed unless we

plan to flush them. We usually start breeding after 75 days and do not intervene with hormones until they are over 100 days and have not shown any heat signs. With the production they are giving, we do not push too hard on reproduction. Services per pregnancy is 2.1 for the Holsteins and 1.6 for the Jerseys. The Jersey statistic includes a couple of flush cows, so would actually be lower if they were not included. As stated in the heifer section, all cows are serviced artificially and according to the same criteria. We do not use very many Jersey young sires, but do use about 50 units of Holstein young sires each year.

*Are there any areas of cow management in which you handle breeds differently?*

**Denniston-Keller:** We run a footbath more frequently for the Holsteins because heel warts are more prevalent in the larger, white-footed breed.

**Elmore:** For the most part, both breeds are managed the same. However, the Swiss seem to require more foot care and management than the Jerseys.

**Moore:** Though we feed the breeds the same ration, we group them by breed because the Jersey can eat twice as much feed, twice as fast and won't leave anything for the other breeds. Both Channel Islands breeds are terrific at converting feed to

milk. We separate them to minimize feed costs and maximize milk production.

Both breeds also have no calving ease problems. We have occasionally implanted Guernsey embryos in Jerseys and the Jerseys have not had problems delivering the calves.

Overall, our impression of the Jersey is that she eats faster, breeds back faster and milks faster than the other breeds.

**Tollenaar:** It is critical to identify a sick Jersey more quickly.

**Wussow:** We have a hoof trimmer come to the farm about three times a year, but notice that the Jersey hooves do not require trimming as much as the Holstein hooves. As well, Jerseys do not have the hoof issues that the Holsteins sometimes do.

*Near dry-off do you manage the breeds differently? Do you consider body conditions at any point during the lactation? Do you notice differences among the breeds?*

**Denniston-Keller:** Body condition score is considered when cows are going dry if they are over-conditioned and will be dry for more than 60 days. Over-conditioned cows will be put on lean pasture. Jerseys tend to hold body condition better than Holsteins.

**Elmore:** Both breeds are given a 60-day dry period. The Jerseys are monitored

more closely for over-conditioning, with feed and dry period adjusted accordingly. The Swiss have a higher tolerance for more body condition and do not have to be watched as closely.

**Moore:** We manage all breeds the same at dry-off, treating them with a dry cow treatment, vaccinating for respiratory and reproductive diseases and de-worming them. We don't consider body score.

**Tollenaar:** All cows are treated equally at dry-off. Body condition is evaluated for nutrition and heard health, but is treated equally for all breeds. All cows are dry treated along with Orbeseal internal teat sealant.

**Wussow:** We do not do anything differently for the two breeds at dry-off, but may vary care with individual cows depending on the amount of milk they are producing. All are dry-cow treated at least once and monitored for proper dry down. If necessary, another treatment is given.

*What is the average age of your herd or the average lactation of the herd? Is there a difference among the breeds?*

**Denniston-Keller:** The average age of the Jersey herd is 44.3 months and the Holstein herd averages 37.3 months.

**Elmore:** The average of the herd is four years-of-age, regardless of breed.

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## Mixed Herd Roundtable

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**Moore:** Some of our mentors were Jersey breeders and helped us out occasionally after we purchased our Jerseys. Other than that, we learned about the breed by working with it. Be cautious with consultants. They understand how to set up wastewater management facilities and can tell you what kind of steel to use for the roof, but don't always understand cows. Work with someone who has experience with cattle and get out there and visit lots of Jersey farms.

**Tollenaar:** There are many consultants that have multiple-breed experiences. Within the Jersey association, there are many members that have much first-hand knowledge and you can contact them easily through the internet.

**Wussow:** We just figured it out on our own, but we are sure Jersey Marketing Service, local extension agents and current Jersey breeders would be able to help others get set up.

*If you could make any changes, what would you do?*

**Denniston-Keller:** We are considering grouping the breeds separately, so we can make the Jersey stalls smaller and fit a few more stalls in the existing barn. We may save some on bedding as well as gaining a few more stalls in the same facility.

**Elmore:** Our facilities work well for us, so no changes are needed at this time.

**Moore:** This year, we will begin construction on new facilities on another property. In addition to the new parlor, which will have indexing capabilities to accommodate different-sized breeds, we will also have different-sized headlocks. Right now, the Jersey heifers sometimes slip out of the headlocks that were constructed for Guernsey heifers.

**Tollenaar:** As we continue to add more Jerseys, free-stall facilities will be modified to the Jersey cow. The neck rail, free-stall length, and width could be adjusted to accommodate the Jersey cow. Depending on herd size, a milking parlor for Jerseys would differ from one for Holsteins or larger breeds of cattle.

**Wussow:** We are going to change the housing facilities for our heifers and dry cows but are not sure the direction we will take on that right now.