Maximize Your Genetic Return.

Find your Genetic Solution with Boviteq West
Boviteq West is a comprehensive reproductive solutions provider, aimed at finding the right genetic solution for every animal and every client. We were created in 2013 by the WestGen Group of Companies as a means of bringing the exceptional research and innovation of our Québec-based namesake, Boviteq™ to the beef and dairy farmers of Western Canada.

Boviteq is a world leader in developing and implementing new techniques for reproductive and genetic solutions. Their labs in Saint-Hyacinthe Quebec are world-class. “Their goal is to make available a range of options to enable breeders to optimize the reproductive career of their elite animals and manage the genetic advancement of their herds.” Dr. Patrick Blondin, Ph.D.

The techniques developed by Boviteq have enabled us to create exceptional quality embryos, and to return the highest possible percentage of embryos back to our customers’ facilities for implantation, dramatically reducing their per embryo costs. Today, Boviteq West is able to offer many different services to help producers improve their herds and achieve their genetic goals.

Your Reproductive Solutions Coordinator

Our Reproductive Solutions Coordinator, Kelsey Patterson, is your primary contact for Boviteq West. Kelsey has a passion for bovine reproduction, and is a trained IVF and conventional embryo transfer lab technician.

TOLL-FREE 1.800.657.5613 EXT. 225 DIRECT: 604.240.5150
info@boviteqwest.com www.boviteqwest.com

Boviteq West’s services Include:

- Boviteq West Recipient Herd Program
- Embryo Transfer
- Conventional Flushing
- Problem Donor Solutions
- IVF
- A Complete WestGen Genetic Plan

Boviteq West’s services can be used to improve your herd:

- LPI
- TPI
- Pro$
- Net Merit
- Milk
- Health
- Reproduction

Are you wanting higher success with embryos? Contact us to find out how Boviteq West can help!
**Choose your genetic solution(s) based on the options that fit your needs:**

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<thead>
<tr>
<th>USE BoviteqWest</th>
<th>PURCHASE GENETICS</th>
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<th>IVF</th>
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### PURCHASE GENETICS
Higher Cost / Lower Risk

- Identify your herd’s genetic weaknesses
- Source embryos or live animals with appropriate traits
- Utilize Boviteq West’s recipient herd or contact us to coordinate a recipient strategy in your area.
- Send resulting calves to Boviteq West as donors for Flushing or IVF as a cost-reduction method.

### CONVENTIONAL FLUSHING
Lower Cost / Mid Risk

- Identify your highest value animals to use as donors
- Select semen that meets your needs: Conventional or Sexed
- Implant fresh embryos immediately into your recipient or at Boviteq West’s recipient herd
- Keep frozen embryos for later use or to sell / export
- Repeat IVF as often as every 2 weeks per animal

### IVF
Mid Cost / Higher Risk

- Identify your highest value animals to use as donors
- Select semen that meets your needs: Conventional, Sexed or Reverse Sorted
- Implant fresh embryos immediately into your recipient or at Boviteq West’s recipient herd
- Keep frozen embryos for later use or to sell / export

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**I want to improve the genetics of my herd**

- Identify your herd’s genetic weaknesses
- Source embryos or live animals with appropriate traits
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- Send resulting calves to Boviteq West as donors for Flushing or IVF as a cost-reduction method.

**I want to get the most out of a high-value animal that I own**

- Identify your highest value animals to use as donors
- Select semen that meets your needs: Conventional or Sexed
- Implant fresh embryos immediately into your recipient or at Boviteq West’s recipient herd
- Keep frozen embryos for later use or to sell / export

**I have mostly low-value animals to work with**

- Utilize Boviteq West’s recipient herd or contact us to coordinate a recipient strategy in your area.
- Send new donors to Boviteq West for Conventional Flushing or IVF
- Keep frozen embryos for later use or to sell / export

**I want to create my own embryos**

- Select semen that meets your needs: Conventional, Sexed or Reverse Sorted
- Implant fresh embryos immediately into your recipient or at Boviteq West’s recipient herd
- Keep frozen embryos for later use or to sell / export

**I’m looking for the fastest way to improve my herd**

- Identify your highest value animals to use as donors
- Select semen that meets your needs: Conventional or Sexed
- Implant fresh embryos immediately into your recipient or at Boviteq West’s recipient herd
- Keep frozen embryos for later use or to sell / export

**I have want to maximize the embryos in my inventory**

- Source embryos or live animals with appropriate traits
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- Repeat IVF as often as every 2 weeks per animal

**I want to create females from sires not available as sexed**

- Select semen that meets your needs: Conventional, Sexed or Reverse Sorted
- Keep frozen embryos for later use or to sell / export

**I want to export and sell the genetics of my herd**

- Source embryos or live animals with appropriate traits
- Utilize Boviteq West’s recipient herd or contact us to coordinate a recipient strategy in your area.
- Send resulting calves to Boviteq West as donors for Flushing or IVF as a cost-reduction method.
- Repeat IVF as often as every 2 weeks per animal

**I’m looking to lower my cost through strategies such as pooling**

- Source embryos or live animals with appropriate traits
- Utilize Boviteq West’s recipient herd or contact us to coordinate a recipient strategy in your area.
- Send resulting calves to Boviteq West as donors for Flushing or IVF as a cost-reduction method.
- Repeat IVF as often as every 2 weeks per animal
Did you know that up to 60 oocytes can be developed together for fertilization? Pooling multiple donors is a cost effective way to maximize returns from your genetic investment.

Allow our specially trained lab technicians to select the best oocytes from each of 3 donors and pool them. Pooling oocytes both lowers costs, and increases the potential for high quality embryos making it an effective choice for all producers.

Reproductive Solutions for Beef Herds

While the benefits of IVF are widely acknowledged among dairy producers, its only more recently that the beef industry has seen how IVF can be applied to their businesses. While purebred herds benefit from the ability to mass-produce offspring from their top show females, commercial herds can also use IVF to quickly spread a highly valuable trait throughout their herd.

Beef cows often make the best IVF donors, and are known for producing many oocytes per collection. It’s therefore not surprising that the number of beef herds benefiting from Boviteq West’s services has been steadily growing as this information becomes more widely known. Many beef producers take advantage of the ability to bank up large quantities of frozen embryos from their best donors, which they can then implant later during the busy breeding season. Collections can even be done year round, thanks to our ability to safely perform IVF collections on pregnant donors. Furthermore, our Reverse Sorting service enables beef producers to breed for whatever gender they need most in their herd.

Healthy Animals Make Healthy Embryos

At Boviteq West, we pride ourselves on having all the animals in our care maintained at an exceptionally high health status. We not only routinely test the blood and health of both our donors and recipients, but we also test every load of forage that enters the barn so we can provide the animals with optimum nutrition.

We know that before you can create great embryos you need the highest quality oocytes, so we strive for nothing short of perfection when it comes to animal care. Our customers can rest assured that their animals will be in good hands during their stay at Boviteq West.

“Your animals are important to us. We provide the best care for your animals based on the plan that is suited to your needs” - Kelsey Patterson

Advantages of IVF

- Faster Genetic Progress Beef or Dairy Program
- Heifers can be enrolled at 7 months - a younger age than with conventional flushing
- More calves / donor / year
- Fertilize multiple donors’ oocytes with a single unit of semen
- Cows producing many unfertilized embryos via conventional often achieve better results with IVF
- Pregnant cows can continue to be collected to 100 days pregnant and sometimes beyond
- Reverse sorted semen maximizes female creation from sires not typically offered in sexed form
- The interval between collections is much shorter - just 14 days

What is Pooling?

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Western Canadian Breeder’s Club

A self-funded, self-governed club to help Western Canadian Dairy Farmers market their genetics. WestGen provides assistance in finding buyers and facilitating transactions to sell your embryos. Strong international markets still exist for good cow families, show type, red and white, or index breeding. We will support you in creating marketable matings, meeting buyers, branding your farm and promoting our superior Canadian genetics worldwide to maximize your success.

Benefits of the club:

- Forum for members to share knowledge
- List your embryos on WestGen’s website
- Coordinate trades, shipments, purchases or sales through club’s network
- Club advertising that benefits all members
- Your embryos and donor cows could be listed on club partner websites such as HolsteinForum.de
- Selling overseas means you never compete against your own genetics locally!
- Member discounts for embryo export
- Western Canadian Breeder’s Club logo to use on your own website
- Membership fees used by the Club to grow its members’ market
- Maximize your ROI on donors within your own program

How will the Club help my farm?

- Expertise and advice on marketable matings for a broad marketplace.
- Herd Profiles and Breeder information on the Breeders Club landing page
- Assistance on effective farm websites and special pricing on new, easy to maintain website options provided through WestGen.
- Providing knowledge sharing opportunities through the network of breeders and club events.
- The club will actively pursue and tour potential international marketers and buyers for its members.
- The club will partner with respected marketers such as HolsteinForum.de to try to bring business to its members.

What else do I need to know?

The club is funding its efforts with a membership fee of $250/year with fees held and used by the club for marketing purposes.

Please contact us at 604.426.1944 | 1.800.563.5603 or email wcbc@westgen.com for more information.

| Every embryo is judged for its quality and classed as either Grade 1 or Grade 2. Grade 1 embryos are preferable, as they provide a higher rate of pregnancy than Grade 2 embryos. Recent studies based out of Québec have found that a Grade 1 embryo has a 60-70% chance of resulting in a successful pregnancy 30 days after implantation, whereas a Grade 2 embryo only has a 40-50% chance. At 60 days after implantation, a Grade 1 embryo still has a 50 - 60% chance of developing into a pregnancy, while the pregnancy rate for a Grade 2 embryo drops to 30-40%.

However, it’s important to remember that even with a perfect embryo, the chances of a pregnancy are going to be poor if you implant it in a bad recipient. The best results will always come from the combination of good donors, good embryos, and careful recipient management.

| Good Donors = MORE Oocytes
| Grade 1 Embryos = BETTER PREG RATE

| Comparable Calves
| Calf weight at birth (kg)
| Small Line
| 39.4
| Large Line
| 42.0

| Expected Conception
| Heifers
| 80%
| 70%
| 60%
| 50%
| 40%
| 30%
| 20%
| 10%

You can expect comparable conception rates between embryos and sexed semen.

This graph indicates a projection of conception rates of ALL viable embryos from an IVF cycle being transferred at day 7 with none being frozen (both grade 1 and grade 2 embryos)

Data shown is based on heifer conception if implanted in cows, data indicates a lower conception rate than that of heifers.

| Pregnancy Rates Per Embryo Grade
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Semen | Sexed Semen | Fresh Embryos | Frozen Embryos

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Satellite Clinics:
Airdrie, Alberta    Brooks, Alberta

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