

BIO Evaluation Group Requirements and Options

1. Benefits of Evaluating Bulls and Heifers

BIO's evaluation services are designed to compare and rank animals within a management group. These comparisons and rankings allow for the following benefits:

1. Determine if your breeding stock is meeting your breeding goals,
2. Determine if you are producing bulls and heifers that meet your client's breeding strategies (i.e. performance and body composition), and
3. Help market your bulls and heifers by using BIO EPDs (BIO Across Breed Comparisons, BIO ABCs) to pick the best bull or heifer for the specific needs of your buyers.

2. Reported Traits

Depending how much data you choose to submit and your service selection, you can have:

- a) Pedigree, raw data, and adjusted data reported for herd traits (i.e. calving ease) and bull/heifer evaluation traits (i.e. ADG).
- b) Ultrasound traits reported.
- c) You can receive BIO EPDs for Birth Weight, Calving Ease, Milk, Weaning Gain, Post Weaning and Yearling Gain, Scrotal Circumference, Back Fat, Ribeye Area, and Marbling (see note regarding economic indexes below).*
 - a. Genetic evaluations consider the animal's performance records, pedigree records and collateral relative (i.e. half-sibs) records. BIO EPD's and BIO\$ accuracy will increase as the number of records increase. BIO EPDs and BIO\$ will not be reported if accuracy is less than 0.10 (10%).
- d) Percentile Scores on BIO EPDs - across and within breed - so you know where an animal ranks for a given trait. An animal must be a minimum of 7/8 of one breed to receive within breed.
- e) ***BIO\$ Economic Index:** BIO\$ can be calculated on each animal. BIO\$ projects the value of the given sire over 2 breeding seasons, targeting an 850 pound carcass with single 'AA' marbling. BIO\$ is reported with a percentile ranking (requirements apply, see weaning information; Section 3.B.3 and unofficial group status; Section 6.6).
 - **BIO\$** requires complete herd records (birth weight, calving ease, born as, raised as, weaning weight) submission to BIO that meets minimum requirements. If you desire BIO\$, then seedstock ultrasound (bulls and heifers) and scrotal circumferences (bulls) are needed.

3. Test Station Requirements:

BIO's role is to provide a service to you, the Centre Manager, as outlined in this document. The management and operation of each evaluation group is the sole responsibility of the Centre Manager. If you are accepting bulls or heifers from additional consignors into your Centre, financial arrangements between you and any additional consignors are your responsibility; BIO assumes no financial responsibility, for consignments to your Centre. Any monies owed to BIO for the operation of your group are the sole responsibility of you as the Centre Manager.

A. Consent Form

All Centre Managers need to complete the **BIO Evaluation and Reporting Services Form** (back page). The BIO Evaluation Service Selection and Consent form covers all your groups for one testing year from October 1 to September 30.

B. Test Group Requirements:

1. Number of Animals and Breeds:

1. To receive complete "BIO Info" – (All BIO EPDs and BIO\$ Economic Index), 5 bulls or heifers need to complete the 112 day evaluation period, it is recommended that 6 or 7 animals **start the adjustment period on the same day.**
2. At least 5 animals in the evaluation group need to be from the list of **base breeds** below to be recognized as an Official BIO Evaluation Group. Other breeds can be included in the group as long as 5 animals are from this breed list. A base breed group is defined as purebred or percentage animals (an animal with more than $\frac{3}{4}$ genetics of one breed) of any one or combination of the following

breeds: Angus, Blonde d' Aquitaine, Charolais, Gelbvieh, Hereford, Limousin, Piedmontese, Red Angus, Salers, Shaver Beef Blend, and Simmental.

2. Weaning Weights and Submission:

You will get the most accurate and complete evaluation of your animals if you submit whole herd records on your entire calf crop.

1. Weaning weights need to be taken between 120 and 280 days of age, ideally when the average age of the entire calf crop is 200-225 days.
2. Weaning weights need to be submitted early, preferably before the Delivery Day data.
3. It is recommended that weaning weights be taken at the farm of origin. However, weaning weights can be the delivery weights for the group – call the office for more information.
4. Additional points on weaning weights (or the contemporary management group):
 - a) The age range in a contemporary group cannot exceed 90 days.
 - b) Contemporary groups (i.e. weaning management groups) must have a minimum of 5 calves (can consist of bulls, steers or heifers) all fed/treated/managed the same with weaning weights taken on the same day to receive a weaning index. Large contemporary groups are most desirable, calves that performed poorly due to sickness and calves there were fed differently need to be identified as a different management group.

3. Ages and Ranges for animals in the Evaluation Group:

1. The age range of the group cannot exceed 90 days. The age of all animals in the group should be between 160 and 280 days of age at the **start of the adjustment period or on delivery day.**

4. Evaluation Centre Facility:

1. The facility should have sufficient protection/ventilation to maintain a comfortable area, regardless of normal local weather fluctuation.
2. If there is more than one pen of animals in the evaluation group, the pens need to be adjacent to minimize potential environmental influence. **Heifers must not be in pens adjacent to bulls.**

Note: The facility may be inspected for compliance with requirements prior to, or at the start of, the adjustment period by BIO. Group approval will be conditional upon this inspection. Facilities not meeting requirements must be changed to comply by the end of the adjustment period.

Note: For Centres where BIO conducts ultrasound, scrotal circumference or hip height measurements, BIO staff can refuse service if safety of personnel or equipment is of concern. This may result in the group being cancelled. BIO reserves the right at its sole discretion to cancel a group, if any issues or concerns regarding the bull/heifer group or facility, including handling facilities, remain unresolved.

6. Handling Facilities (Chute/Scale/Squeeze and Processing Area):

1. A **roof** should be over the working chute, head gate and scale; this area must be safe, dry and **well protected from animal flow** for the ultrasound equipment and computer. If no roof is present BIO holds the right to reschedule the on-farm service due to weather conditions.
2. A **working chute/squeeze** and head gate are required that contain:
 - a) **A safety/kick bar** in the chute/scale/squeeze 5 feet, 5½ feet and 6 feet from the head gate and 12" - 16" above the floor of the chute.
 - b) **Removable side panels** for ultrasounding and a gate for access to the rear of the animal.
 - c) A clean, solid, and level floor if taking hip height measurements.
 - d) A method of holding back the next animal.
4. Adequate lighting and a 110 volt outlet must be present.
5. An **individual cattle scale** with a capacity of 2,000 lbs (900 kg), weighing accurately in increments of 5 lbs or less is required. Included must be a cage/crate that allows for efficient and accurate weighing of animals weighing 400 to 2,000 lbs. The scale cage/crate must be attached securely to the weighing platform, to prevent weighing errors. Portable scales can be used. For accurate weighing, the same scale needs to be used for all weighing during the evaluation period.

4. Managing & Operating the Group (What Do I Need to Do?)

Proper management and nutrition will help ensure animals express their genetic potential.

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A. Before Delivery

1. Notify BIO and interested consignors of your group(s) details/requirements, including:
 - a) Age ranges for group(s).
 - b) Vaccination requirements.
 - c) Important dates: Delivery, SOT, EOT.
 - d) BIO Evaluation and Reporting Services that you have selected for the group(s).
 - e) Feeding/ration details.
 - f) General management details (housing, bedding, handling facilities etc.).
2. If a Consignment Centre, determine your per bull **price** and inform interested consignors. **Consider the BIO Evaluation and Reporting Services that you selected for the whole group(s) when determining this price, as you will be charged for these services for the entire group.**

Note: Insurance for mortality or morbidity is the sole responsibility of the bull/heifer owner(s). If you are taking in consignments, you need to remind consignors of this, before they deliver animals.

B. Delivery Day (Start of Adjustment Period)

1. Centre Managers must **ensure there is a BIO Evaluation and Reporting Services Form** completed for each consignor. If a consignor does not send one, contact the consignor and have them complete one, or complete a blank form with the information you have.
 - a) All Client Consent Forms need to be submitted to BIO **2 weeks after the Delivery date**.
2. Verify that consignors have met the **vaccination requirements** for your group.
 - a) Consult your veterinarian for a 1) preconditioning and vaccination program and, 2) a health monitoring and treatment program, **before** the adjustment period.
3. Record **delivery weights** and tag numbers.
 - a) **Bull weight** at delivery must be at least 500 pounds.
 - b) All animals in the group must be ear tagged, ideally, with no duplicates.
4. **Read and verify tattoos** against the tattoos recorded on the Client Consent Form. Consignors are responsible to ensure their animals have complete, legible tattoos.
5. You must check bulls, by means of palpation, **for two normal testicles**. Bulls with testicular abnormalities (irregular or small or only one testicle) **will not be** included in the group.
6. Verify bulls **have not been implanted** with a growth stimulant.

C. Adjustment Period

1. All calves in the evaluation group must complete the adjustment period together (in the Centre), beginning at least 28 days prior to the start of official evaluation, (start of test; SOT). Only animals that were delivered to the Centre, weighed and identified at the beginning of the adjustment period are eligible for official evaluation. During adjustment, animals will be gradually brought onto feed.

D. During the Test Period

1. **Test Length:** The length of the evaluation period from SOT to End of Test (EOT) is 112 days, +/- 7 days, with a 28 day adjustment period at the beginning for a total length of 140 days.
2. **Grouping:** For accurate BIO EPDs and BIO\$ it is mandatory that animals are managed with the same group for the entire evaluation period to receive official status.
3. **Weights:** The Centre Manager is responsible for weighing animals. Weights should be taken every 28 days. A minimum of three weights are required; SOT, EOT and one weight in-between. **Consignment Centres must take weights every 28 days**. The weights need to be faxed, telephoned or emailed to the office **within 24 hours** of weighing.
4. **Feed and Feeding:** To maintain official status as a BIO evaluation group, the group **must be fed** and managed to target a 112-day (End of Test) **cumulative** average daily gain of **3 lbs/day for bulls, 1.75 lbs/day for heifers**. If target a gain less than this, please call the office to discuss. Otherwise, the evaluation group will receive an unofficial status*. **Proper feeding and management of the evaluation group(s) is the responsibility of the Centre Manager**. We recommend that you have your feed and roughage analyzed and consult a nutritionist.
 - a) Feed (including good quality roughage) and water must be free of contamination and available at all times. A ration report (i.e. ingredients, product name and guaranteed analysis) should be submitted with your *BIO Evaluation and Reporting Services Form*.

*See 6.6, Unofficial Status

5. **Bedding and Pens:** Animals need to be bedded adequately, to keep them free of tag and dry.
 - a) Animals should not have excess tag on them at the EOT. Total stocking density must exceed 50 ft²/animal, 30ft²/animal in bedded areas, not including around waterers and feeders.
 - b) Consider how to provide additional exercise for the animals. Consignors and buyers support exercise areas or access to large outside yards that are not concrete.
 - c) Eliminate sharp edges or corners. Locate pens close together, to minimize environmental effects.
 - d) Manure and yard runoff should be handled in an environmentally safe manner.

E. End of Test (EOT)

1. At EOT, final weights, scrotal circumferences, hip heights and ultrasound images may be collected, pending on the services you choose. All must be taken within 7 days of EOT.
 - a) For efficient ultrasounding, the animal will be clipped at the scan sites (11th-13th rib and hip), if the hair coat is greater than a half-inch.

5. Tips for Successful BIO Evaluation Groups

1. Inform clients if their animal is: sick (for a long period or re-lapse), has suffered an injury, or health and vet costs on their animal are climbing rapidly.
2. Inform clients of any problems that affect the whole group (i.e. disease outbreak).
3. Although age ranges within a group can be 90 days, tighten the age range to 60 days.
4. Record every health treatment on your clients' animals.
5. Communicate with BIO, if you're having difficulties with the group(s) (health, ration, water, etc.)
6. Have a display area for reports; or an area where clients, during a visit can readily access reports.
7. Promote buyer and consignor interaction through advertising, open houses, sales or other means.
8. Work with BIO and the client to resolve any disputes that may arise.

6. BIO's Responsibilities, Terms and Conditions

1. Provide Centre Managers with *BIO Group Evaluation Requirements and Options* document (this document) and *Client Consent Forms*.
2. Perform data processing and calculate, report and publish information based on the *Evaluation and Reporting Options* chosen.
3. Provide staff for ultrasound data collection at the End of Test (Ontario only).
4. **Invoicing and Payment** There will be two invoices, due within 30 days of the invoice date:
 - a) Start-of-Test (SOT) Invoice: *Reporting Option and Additional Service* fees, for all the group.
 - b) End of Test (EOT) Invoice: Ultrasound fee based on *Trait Option* selected.
5. **Your account must be in good standing with BIO.** Delivery data may not be processed if your account is outstanding OR if the *BIO Evaluation and Reporting Services Form* has not been submitted. All overdue accounts will be charged interest. If the SOT invoice is not paid before:
 - a) 84-day weigh- 84 day evaluations/reports not released until account is paid in full.
 - b) EOT, EOT services may not be provided and/or final results may not be released until the account is in good standing.
6. **Unofficial Status:** If the requirements for official evaluations are not met, the entire group will be reported as an unofficial evaluation group. **Unofficial evaluation reports do not contain BIO EPDs or BIO\$.** Individual BIO Performance Certificates or Genetic Score Cards will not be provided. Service fees will be charged in accordance with the BIO Evaluation and Reporting Services Form. If individual animals do not meet all requirements, their status on the reports may be unofficial and they will not receive **BIO EPDs or BIO\$** BIO Performance Certificates.
7. Decisions made regarding **animal and/or group eligibility** will be made by BIO and are final.
8. **Late Submission of Data Policy:** No changes or additions to information on BIO evaluation reports will be accepted after the scheduled End-of-Test date.

BIO Evaluation and Reporting Services Form

Submit with Client Consent Forms

NAME:	CLIENT #:	GROUP #:
FARM NAME:	EMAIL:	# OF ANIMALS:
<i>(Include your fire code or civic address if available)</i>		
ADDRESS:		POSTAL CODE:
HOME TEL:	CELL:	FAX NO:

Evaluation and Reporting Options	Fees
A) Trait Option: <i>select one</i> <input type="checkbox"/> Growth Only (ADG, weight per day of age) <input type="checkbox"/> Growth + Carcass Ultrasound (marbling and backfat) <input type="checkbox"/> Growth + Seedstock Ultrasound (marbling, backfat, ribeye, rump fat) + Economic Index (BIO\$) <input type="checkbox"/> Growth + Seedstock Ultrasound (data sent through CUP to breed association) + Economic Index (BIO\$)	No fee \$7/head + scan time at \$80/hour + travel expenses + mileage (\$0.49/km) \$12/head + scan time at \$80/hour + travel expenses + mileage (\$0.49/km) \$22/head + scan time at \$80/hour + travel expenses + mileage (\$0.49/km)
B) Reporting Option: <i>select one</i> <input type="checkbox"/> View results only in bioTrack or <input type="checkbox"/> One BIO End of Test Bull/Heifer Report or <input type="checkbox"/> All BIO Interim and EOT Reports and	\$15/head \$31/head \$36/head
C) Additional Services: <i>select none, one, or multiple</i> <input type="checkbox"/> Report(s) posted to BIO's website <input type="checkbox"/> Email notification-for all the consignors in your group as reports are updated to BIO's Website <input type="checkbox"/> Data entry- we input your paper herd records <input type="checkbox"/> BIO Evaluation Ear Tags #of tags_____	\$20/head (for bioTrack users) or \$40/head (non-bioTrack users)-\$200 cap on report fees \$75 for the group (all reports) \$80/hour \$2/tag

Note: Fees subject to change without notice.

Note: Additional measurements can be reported, if taken:

1. Herd data: birth weights, calving ease, born as, raised as and weaning weight.
2. Scrotal circumference and hip heights.

Birthdates of oldest calf and youngest calf in group:	Oldest:	Youngest:
Proposed Dates for:	Delivery:	SOT:
Ration Statement on Title Page of Bull Reports: <i>optional</i>		
VETERINARIAN:	TELEPHONE NUMBER: ()	

Ration Information: Has Ration been sent for Feed Analysis: Yes____ No____

Type of Ration: _____

Targeted Daily Feed Consumption/animal: _____ Type of Roughage that will be fed: _____

I hereby understand and agree to abide by the terms, conditions and fees detailed in the BIO Evaluation Group Requirements and Options document and BIO Evaluation and Reporting Services Form (revised 2017).

DATE:	SIGNATURE:
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