2016/17 Idaho Barley Commission in Review

2016/17 offered many challenges and opportunities for the Idaho barley industry. We started the year with a cut in malting contract prices and volumes due to excessive inventories. Fortunately, our desirable location to processing plants and excellent growing conditions meant that Idaho producers took smaller cuts than producers in neighboring states.

Many producers faced unanticipated costs and tricky harvest logistics when required to store last year’s crop well beyond the end of the normal marketing year due to the clogged supply pipeline. Producers met these challenges with tenacity and ingenuity — hallmarks of the strong character of our excellent barley producers across the state.

The Idaho barley industry has been resilient in the face of these curveballs. This year we estimate that Idaho will produce at least 35 percent of the total U.S. barley crop.

Looking down the road we see many promising opportunities for Idaho barley, with the expansion of the Great Western Malting Co.’s processing plant in Pocatello and expansion of food barley acres in both northern and southern Idaho.

The IBC board is currently engaged in an in-depth strategic assessment of future research and marketing investments that will continue to build on this exciting momentum. Our board is governed by three producers and one industry representative. Pat Purdy, District 2 Commissioner is currently serving as Chairman and in his 6th and final year on the board.

Wes Hubbard, District 1 producer from Bonners Ferry is in his 2nd year on the board and is currently serving as Vice Chairman. The other two board members were recently reappointed to serve a second term — Scott Brown, District 3 Commissioner from Soda Springs and Tim Pella, industry representative and Anheuser Busch facilities manager in Idaho Falls.
Idaho Barley Targets Craft Brewers and Food Manufacturers

IBC worked closely with key industry partners this year to increase Idaho grown barley malt sales to the craft beer manufacturers across the Western U.S. and Mexico. In an entirely different marketing channel, we have partnered with McKay Seed, PNW Farmers Cooperative and Thresher to expand food barley sales to Asian food manufacturers. Both marketing campaigns are paying dividends.

For the third consecutive year, IBC hosted a Craft Brewer Barley Short Course in eastern Idaho. We are the #1 barley producing state, with a very large base of two-row malting barley production desired by craft brewers. Eastern Idaho is home to three highly efficient malt processing facilities: Great Western Malting Company’s newly expanded plant in Pocatello and two malt plants operated by Anheuser Busch in Idaho Falls. It is important to note that our two largest buyers of Idaho malting barley – Anheuser Busch and MillerCoors – are actively engaged in craft brewing. In fact, MillerCoors’ Blue Moon brand is one of the top selling craft beers in America.

Food barley on the rise... After several years of modest growth in north Idaho, we have seen a five-fold increase in food barley production across the state in 2017. While most of the commercial production remains in north Idaho because of strong industry partners based in this region, we see exciting opportunities to expand food barley production to southern and eastern Idaho.

Dan McKay was presented the 2017 Idaho Barley Industry Service Award during the dedication of his new food barley cleaning elevator in Tensed. Japanese food barley customers attended the August 23 open house, along with representatives of the Idaho Barley Commission (Vice Chairman Wes Hubbard is featured far right). McKay Seed made this investment in a new Idaho food barley elevator as part of their regional strategy to increase food barley acres for the Japanese and domestic markets.

Barley offers many advantages in the human diet; chief among these are:

- Highest fiber content of any grain.
- Weight control.
- Reduced cholesterol and risk of hearth disease.
- Improved gut health (prebiotic) and lower risk of colon cancer.
- Low glycemic content suitable for Type 2 diabetes diet.

In partnership with McKay Seed and Highland Specialty Grains, IBC is launching a major food barley marketing campaign this year, targeting school meals and other major food service markets, food manufacturers and health professionals. We will be rolling out this new marketing campaign in fall 2017. We anticipate food barley acres will continue to expand next year.
Now on the job two years, Dr. Christopher W. Rogers, the Endowed Barley Research Agronomist and soil fertility scientist based in Aberdeen, continues to expand his barley research program to help growers optimize inputs and maximize economic returns. Chris is currently supervising a graduate student who began in Spring 2017 who is investigating fertilizer nitrogen recovery using stable isotope tracers. Additionally, UI-CALS has provided support for a post-doctoral fellow who will begin in Winter 2017 to support publication and dissemination of research from the Barley Agronomy program.

The following is a progress report from Dr. Chris Rogers:

- Evaluating soil test methods for determining N fertilizer recommendations tailored to specific malting barley varieties:

  Study findings are currently being finalized for publication.

- Determining N partitioning and fertilizer N use efficiency using enriched isotope tracers:

  Initial results from the 2016 growing season indicated that irrigated malt barley had high fertilizer nitrogen recovery under recommended management practices. When fertilizer was incorporated via tillage fertilizer N recovery was nearly 60 percent; however, when fertilizer was surface applied recovery was reduced to 45 percent. Recovery from the 1st foot of soil was 16 percent, the 2nd foot 3 percent, and the 3rd foot only 1 percent, indicating minimal leaching within the soil profile. These results indicate a high nitrogen use efficiency in both the plant and the top soil depth.

- Evaluating variety and N management strategies to enhance spring and winter barley malting barley performance (supported by the Brewers Association):

  This project is a robust and long-term evaluation of variety by nitrogen responses to optimize yields and proteins suitable for the craft brewing industry. The study has a large focus on winter malting barley varieties that may become more widely adapted to meet regional craft brewer needs. Variety selection has narrowed in on modern varieties specifically bred for the craft industry and as well as several historical varieties. The 2016-2017 evaluation year was difficult for our winter nursery as extensive snow cover exceeding two feet for extended period of times, and extensive freeze thaw cycles damaged our crop. However, winter barley, despite looking poor early in the year, can be fairly resilient and we were able to salvage a portion of the study.

  - Optimizing N fertility recommendations and final irrigation scheduling (supported by MillerCoors):

    We have completed our final year of this study and will be working to publish our results shortly. The first two years were quite consistent in terms of response and we are hopeful the third year will provide consistent data. In collaboration with Dr. Howard Neibling, we have published a new extension bulletin (http://www.cals.uidaho.edu/edComm/pdf/BUL/BUL912.pdf) to provide valuable information to Idaho growers. This bulletin provides detailed information related to water usage, soil factors, final irrigation timing, as well as economic analysis from studies conducted in Idaho. This bulletin also provides detailed information on the often asked question, What is Soft Dough?

    - Evaluating the effects of irrigation management and variety selection on malting barley yield and quality:

      We are evaluating malt barley response under three irrigation regimes (100, 75, and 50% ET) using both traditional and new craft brew lines of interest to the craft industry. Specific lines were selected in cooperation with Dr. Gonghse Hu, USDA-ARS Barley Breeder, based on preliminary drought stress trials. Dr. Hu’s program has specifically been investigating lines that retain low protein and optimal malting quality under drought stressed conditions. The study will be continued in upcoming growing seasons and will provide valuable information to growers on commercial variety response to drought stress as well as novel information on breeding lines in the USDA-ARS program. These results can also be used by barley breeding programs for guidance on malting yield and quality response when making selections for specific industry needs.