University of Idaho Extension

THE AG TALK REPORT

No.4 September 30, 2019

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Here's what you missed at the August 6 and August 20 Ag Talk Tuesday sessions … and other Hot Topics:

AG TALK TUESDAY SCHEDULE FOR 2020

The 2019 season of Ag Talk Tuesday has come to a close (last session for the season was August 20 in Rupert), and Ag Talk Tuesday will resume on the first Tuesday of May 2020 (time and place to be determined). Time and locations will be determined; feel free to contact the organizers if you have suggestions for optimal start times (8:00 AM, 10:00 AM, or Noon) and if/when you'd like to see an Ag Talk Tuesday session held in your neck of the woods.

Kasia Duellman
Pam Hutchinson
Juliet Marshall
Ag Talk Tuesday Organizers

CALL-IN NUMBER FOR AG TALK TUESDAY 2020

If you can't attend an Ag Talk Tuesday session in person, you can still participate remotely. The same call-in phone number and meeting ID will be used in 2020, and if you prefer, you can access the sessions via the online meeting app known as Zoom.

Call-in Number: (669) 900-6833
Meeting ID: 349427773
(Optional) Zoom link: https://uidaho.zoom.us/j/349427773

CEREALS AGRONOMY AND PATHOLOGY UPDATE

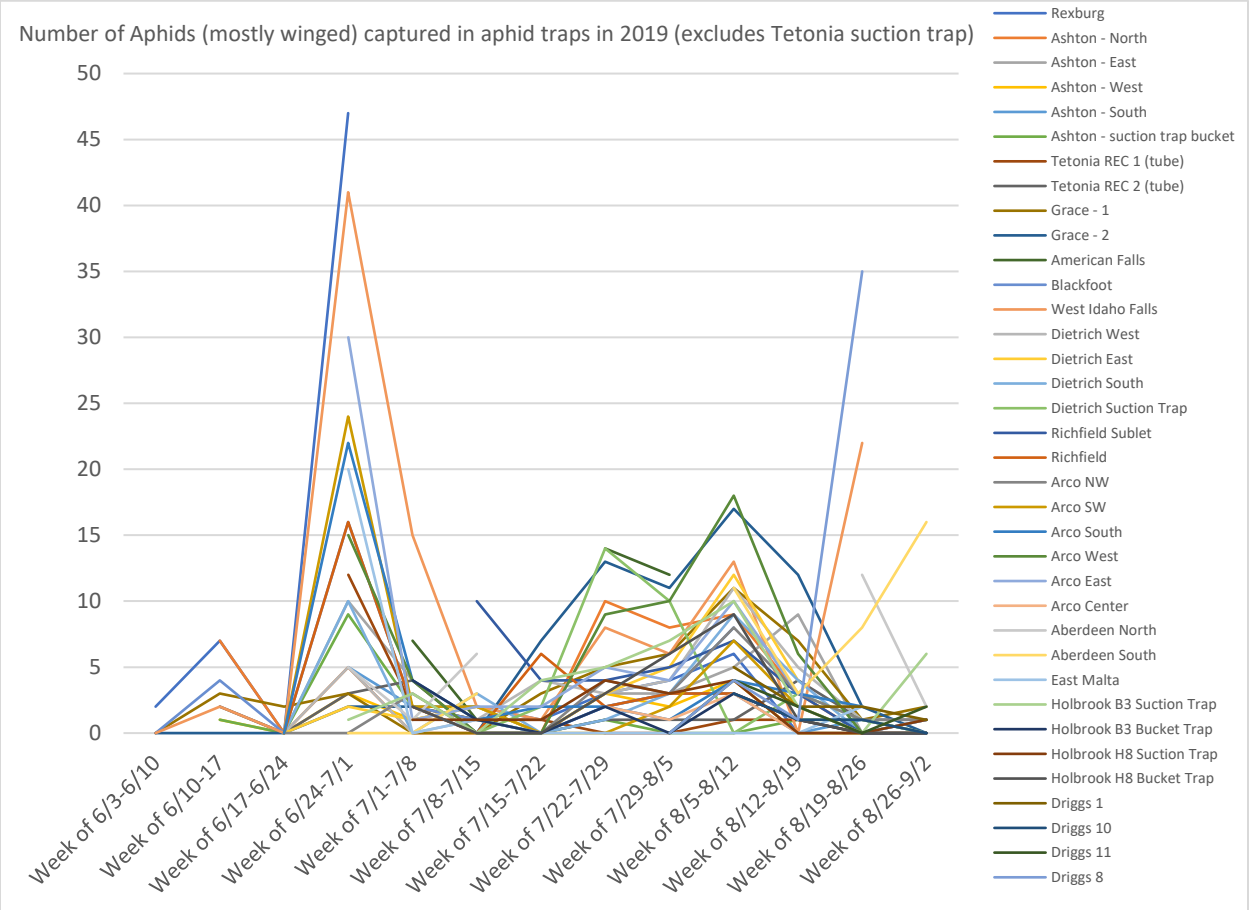
Results from the Extension Variety Trials are available on our website at https://www.uidaho.edu/extension/cereals/scseidaho. Additional locations will be added to the website as the data becomes available. New to website is the addition of falling numbers data from the extension variety trials from 2013 to 2018.

Overall, the year resulted in good yields with low disease. Prevalent soilborne diseases depended on crop rotation. Take-all and cereal cyst nematodes were problematic in grain following grain. Foliar diseases were limited to stripe rust and black chaff/bacterial streak. Cold temperatures during flowering resulted in very poor yields of some winter and some spring cereal crops. Cooler temperatures seemed to keep Fusarium Head Blight (FHB) and DON levels low, although the disease could be found in commercial production. Some excellent yields were obtained in some of the variety trials and under commercial production.

Juliet Marshall
Cereals Agronomist and Plant Pathologist

APHID MONITORING NETWORK – FINAL COUNTS FOR 2019

The results of the aphid monitoring network (in partnership with the University of Idaho, the Idaho Crop Improvement Association, and the Idaho Potato Commission) are in for 2019. Once a week throughout the growing season, we monitored total numbers of aphids caught in 2-gallon yellow bucket traps at up to 37 sites. The yellow bucket traps were filled weekly with water (copper sulfate added as an antimicrobial and a drop of dishsoap added to break surface tension). In short, aphids appear to be in flight to varying degrees throughout the summer. Interestingly, the numbers appear to peak in similar patterns for most locations across southeast Idaho. See the chart below for the 2019 summary.



We plan to resume monitoring efforts in 2020, ideally before potatoes emerge. Email Kasia Duellman at kduellman@uidaho.edu if you'd like the protocol to setup and service your own traps in 2020; if you send us the sieved contents of the buckets, we will count aphids for you and add the information to our network, which is distributed weekly. (Aphid identification will be offered only for selected sites in 2020.) Collaborators on this IPC-funded project are University of Idaho personnel (Kasia Duellman, James Woodhall, Erik Wenninger, Justin Hatch, Jason Thomas), Idaho Crop Improvement Association personnel (Alan Westra), and independent entomologist Andy Jensen.

Kasia Duellman
Extension Seed Potato Pathologist

POTATO PATHOLOGY UPDATE

Overall, disease issues across the state during the 2019 growing season have been unremarkable in general, with Rhizoctonia stem canker, early blight, and white mold making their

annual appearances. Of note is the late blight detections in August in the Minidoka county area, specifically near Paul. No further issues with late blight have been reported and growers near affected areas appeared to have gotten the outbreak under control. If blight was present in the field or in the vicinity of an affected field, it may also be beneficial to spray foliage after vine killing with labeled fungicides to kill living late blight spores on the foliage. An application of phosphorous acid is also a good option to protect healthy tubers as they are moved into storage.

The 2019 harvest was delayed in mid September due to excess rains and cold temperatures in early October. More information on cold weather impact on potatoes can be found in a recent release from the Idaho Potato Pulse newsletter by clicking on this link.

Kasia Duellman
Extension Seed Potato Pathologist
Phillip Wharton
Potato Pathologist
Nora Olsen
Extension Potato Specialist
Jeff Miller
Miller Research LLC

COVER CROPS

(Steven Hines provides this overview that summarizes some Extension cover crop work that he presented in-depth at the Ag Talk Tuesday session held in Rupert on August 20.)

In 2013 and 2014 UI Extension Educators conducted a study to look at the feasibility of growing cover crops in the Magic Valley region. A few producers were experimenting with cover crops but the practice was not widely adopted at that time. The goals of this initial work were to successfully grow cover crops under both sprinkler and furrow irrigation and to evaluate the amount of forage potential cover crops could provide for grazing.

In 2013 we used a mix of winter triticale, 2 types of forage peas, two types of winter peas, Hairy vetch, red clover, turnips, and Daikon radish. The forage mix was planted at 148 lbs/acre with a seed cost of $86/acre. The “soil health” mix was planted at 40 lbs/acre with a much more reasonable seed cost of $43/acre. The mixes were planted on several farms from Malta to Shoshone. The forage mix provided from 2500-7000 lbs DM/acre. Planting timing and irrigation management were crucial.

In 2014 we revised the mix to include only winter triticale, one forage pea, one winter pea, turnip and Daikon radish. It was evident we needed to bring the seed cost down and based on observations valley wide in 2013, the perennial forages were a waste of money in these mixes because they couldn’t compete in the fall and the mixes were tilled out ahead of the cash crop in the spring leaving little time for the legumes to add any nitrogen. The mix in 2014 was planted at 60 and 40 lbs/acre for seed costs of $42 and $28/acre respectively. While yields varied, it was evident that the 2014 mixes provided plenty of forage for fall grazing as vastly reduced inputs. The outcome of the study provided evidence that cover crops can be grown in the fall for forage or soil health purposes anywhere in the Magic Valley Region.

Extension educators were asked about planting cover crops into standing corn so there was cover crop for forage or ground cover after corn was cut for silage. We conducted a two-year study on a farm in the Raft River area where we planted cover crop on the same day of corn planting, approximately V-6, 30 days after V-6, and 60 days after V-6. We also used a no cover crop check to evaluate whether the cover crop caused a yield lag on the corn crop. The cover crop mix used each year

was provided by the cooperating grower as they were applying the mix to several pivots on their farm in conjunction with our work.

The quick conclusion of this study is that it is possible to grow a good cover crop under growing corn. Seeding timing is critical. The seed must be planted after the herbicides are put down but before the corn closes the canopy. The ideal time is approximately the V-6 stage. In the case of our study this was about June 15th on early May planted corn. The mid-July planting (30 days after V-6) provided some usable forage as well but it was not as productive as the early planted treatment. We planted the corn with hand held spreaders attempting to simulate aerial seeding. Some high-clearance planters have been built around the country, but they aren't very practical if a grower isn't cultivating or shanking in nitrogen. Neither of those are common practices in this area anymore.

A producer in a high elevation valley wanted to add another rotation crop to his barley/alfalfa rotation and improve some poor soils at the same time. He worked with Extension and others to design a rotational grazing fencing system around a pivot. The idea was to use cover crops for grazing during the summer and use the income from leasing the pivot to a cattle producer for the cash income, thus adding another rotational crop. In May the producer no-tilled a mix of forage oat, forage barley, vetch, and turnip. The cattle (~ 600 lb. market heifers) started grazing on June 28th and stayed through September 14th. After the heifers were pulled, cow/calf pairs were moved in to finish up the remaining lower quality forage.

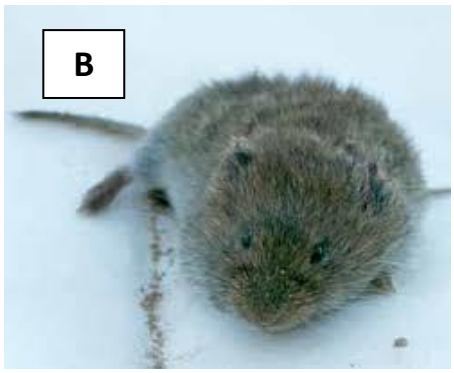
The trial was a success in that the system is possible and does have financial merit. What we learned was that the cover crop produced far more forage than expected and there weren't enough heifers to keep it grazed and stay ahead of the growth. For the system to work efficiently a producer must be able to bring on extra cattle early and then have a place for some to go later in the season when plant regrowth has slowed. It is critical to be able to use the high-quality early season forage to maximize livestock gain and income. Also, there are some upfront costs such and fencing and water supply materials that will need to be amortized over several seasons. This producer had hired help moving cattle to a new paddock once a day so there are some labor costs involved as well.

Using cover crops as an annual forage crop is possible but careful consideration must be given to the set up of the system to manage cattle and the crop. Careful management of both cattle and crop is vital to financial success.

Steven Hines
Extension Educator, Crops – Jerome County

UTILIZING BARN OWLS TO HELP MANAGE IDAHO VOLE POPULATIONS

(Jason Thomas discussed this interesting topic during the Ag Talk Tuesday session held August 20 in Rupert.)



A. An adult barn owl; B. A vole; and C. A barn owl box near a field (Photos A and C courtesy J. Thomas and Photo B courtesy D. Gunn, University of Idaho Extension)

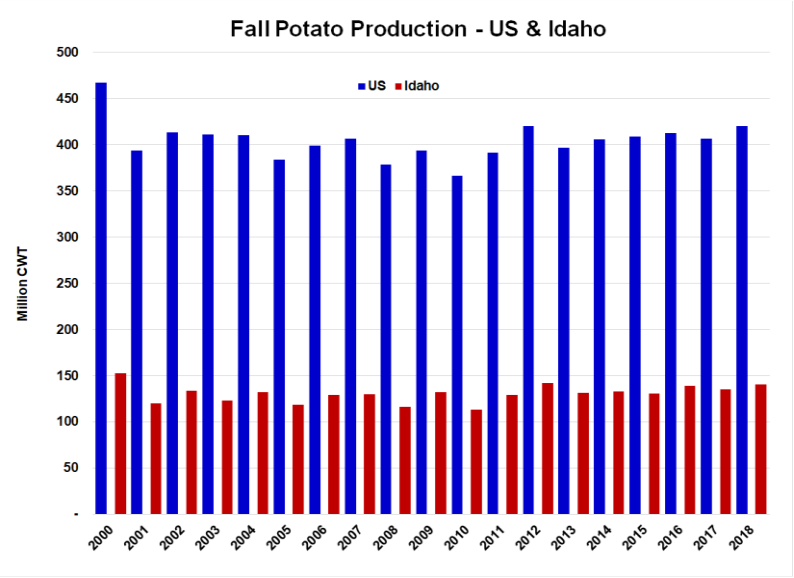
One strategy to help manage voles is the usage of biological control agents. One promising candidate is barn owls which are already native to Idaho. A typical barn owl family can feed on over 2,800 voles in 3 months during mating season. Boxes have been deployed in regions of the magic valley and other parts of southern Idaho. Our research found that boxes should be deployed after July to reduce starling nesting competition. Further research is necessary to learn about nesting rates, but these animals show promise. In an organic dairy in the Twin Falls area they have 30 boxes on 1,000 acres used for mostly pasture. Of these boxes this last year they had a 64% nesting rate, but over the past 3 years 97% of the boxes have been used by owls. We believe the usage of barn owls in agricultural settings could help reduce vole populations and present alternatives to expensive pesticides that can have unintended environmental consequences as they are used frequently. More information can be found online at https://www.uidaho.edu/extension/county/minidoka/agriculture/barn-owl.

Jason Thomas
Extension Educator – Minidoka County

POTATO ECONOMICS

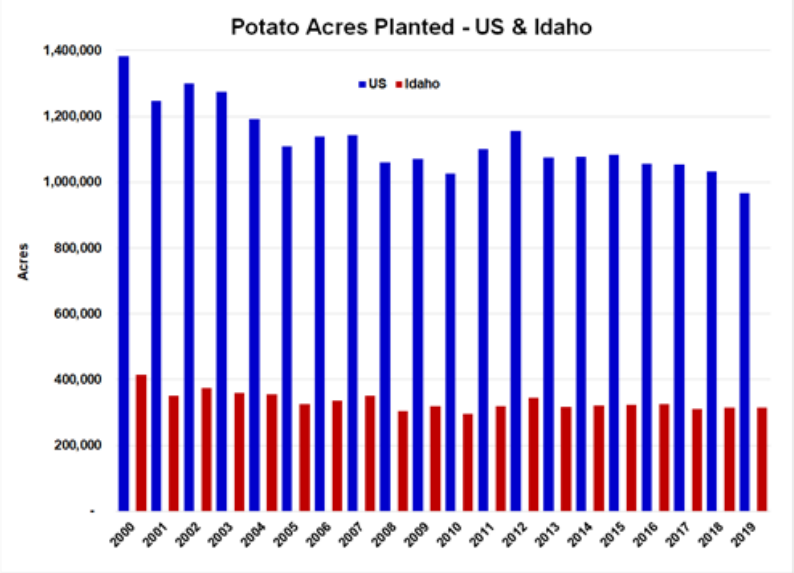
(Ben Eborn discussed aspects of potato economics and provided the charts below during the Ag Talk Tuesday session held on August 6 in Pocatello.)

Idaho Potato Production & Prices



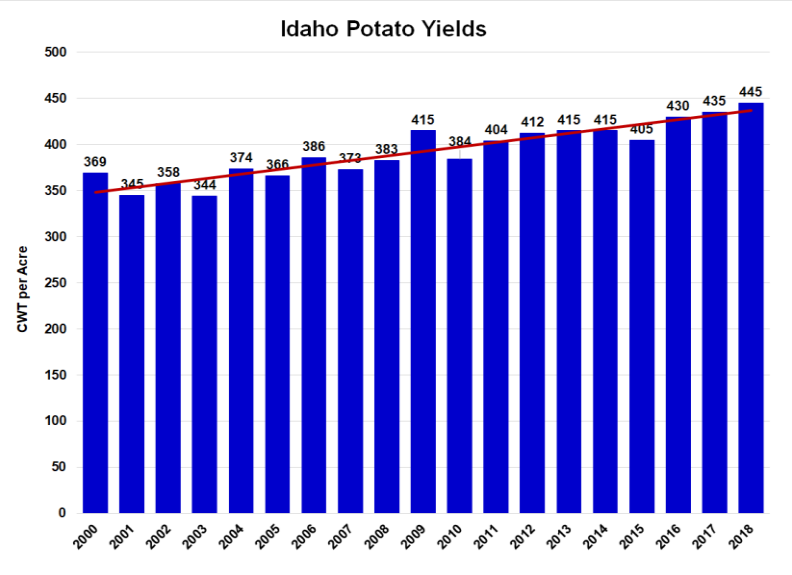
Idaho produced an annual average of 132,460,600 cwt of potatoes over the last 10 years.

Idaho production in 2018 was 132,300,000 cwt.



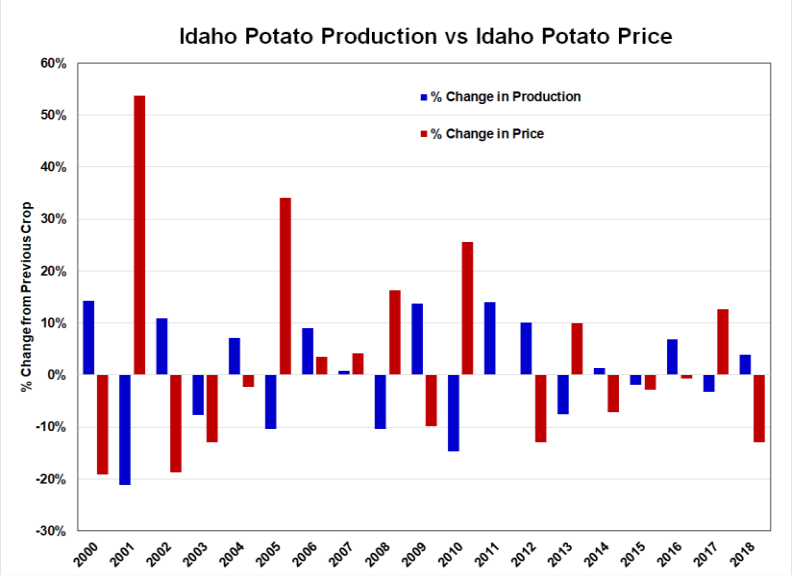
Idaho potato acres planted averaged 318,600 per year over the last 10 years.

Potato acres planted in 2019 is estimated to be 315,000 – 3,600 acres below the 10-year average.



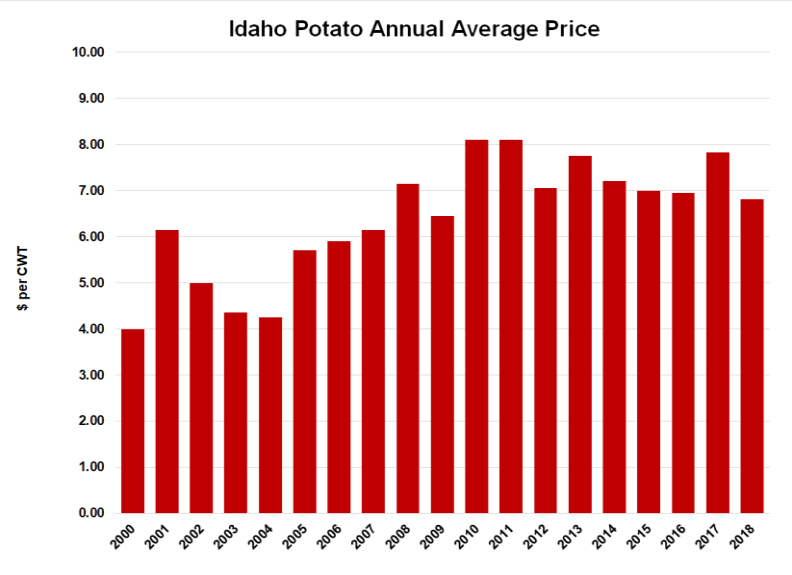
Idaho potato yield trendline increases 5-6 cwt per acre per year.

Idaho farmers would need to reduce planted acres by roughly 3,500 acres (a 1.1% reduction) per year to stabilize production.

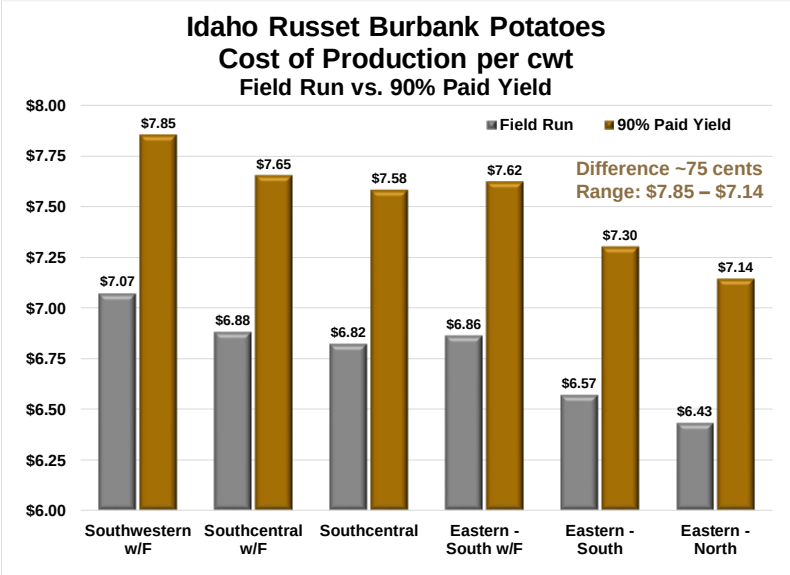


In the past prices and production were much more volatile than they have been in recent years.

Market conditions have changed, and annual production has become more stable. Annual price variation has been significantly reduced (especially on the upside).



Idaho prices have averaged $7.33 per cwt for the last 10 years and $7.16 per cwt for the last 5 years.



University of Idaho cost of production estimates for 2018 were between $6.43 and $7.07 per cwt on a field-run basis.

At 90% paid yield the cost of production were between $7.14 and $7.85 per cwt.

Ben Eborn
Extension Ag Economist

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