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## Department of Research Centers



# Research Center News

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## Message from Barry

MAES Long Range Building Programs funded in the last legislative session are moving along. The Pesticide handling and storage facility at NARC is done (see pg. 3) and facilities at WTRAC, WARC and NWARC and the Post Farm have been bid and contracts signed with construction to start soon. Shop facilities at NWARC and CARC have also been bid and contracts signed again with construction to start soon. Thank you to the 2015 State Legislators, Advisory Committee members and others who helped to get these critical facilities!

Faculty searches currently underway include an Assistant Professor of Plant Pathology at EARC and an Assistant Professor-Cropping Systems at NARC. Four candidates will interview for the EARC position the first and second weeks of May. Interviews for the NARC position should occur in late May or early June. In July we will begin searches for an Assistant Professor of Fruit Horticulture at WARC and for an Assistant Professor of Agronomy/Applied Soil Microbiology at CARC. This later position will fill the position left vacant by the resignation of Dave Wichman.

In mid-March Dave Wichman, Superintendent & Assistant Professor of Agronomy informed us that he will be resigning effective July 8, 2016. Dave has been associated with MAES (SARC 1976-1980, CARC 1985-2016) for 35 years. He started at the CARC as an Assistant Professor-Research Scientist in 1985 and since 1990 he has served as Superintendent and Assistant Professor of Agronomy at CARC. He received his BS in Ag Production Agronomy in 1976 and his MS in Plant Science in 1983 both from MSU. He worked for Continental grain from 1980-1984. I have known Dave since 1992 and consider him to be an "Agronomist's Agronomist". His research impact has been felt in many areas statewide including; forage crops, pulse crops, oil seed crops, cereal agronomy, and foundation seed. Most recently he led the release of a sorghum variety suitable for MT and a spineless safflower variety. Dave has always been in the forefront of agronomic change in MT. He told me that in 1992 after Dave talked about the potential for pea production at the CARC Field Day, an advisory committee member told him we grow wheat in central Montana not peas; now that producer has more than 200 acres of peas. We wish Dave well in his future endeavors and the State of Montana owes him a deep debt of gratitude for a job well done! He will leave big shoes to fill.



The Department of Research Centers initiated a summer research internship program for this summer. Eight students were selected from 26 applicants for eight week research internships. There will be interns at each Research Centers. This program was started to encourage graduates to consider employment at MAES Research Centers. You are invited to follow the NARC and NWARC Facebook pages (pgs. 2 & 3) to see what the students are doing.

Sincerely,



## Save the date!

Summer Conference  
at SARC in Huntley  
June 29, 2016!

## *News from Central*

The winter season at CARC has been warm and dry. Ten of the past 14-months have been drier than the 105 year average. The first date of seeding entries were seeded on March 3rd. New cropping systems scientist, Pat Carr, started on January 25 and has been diligently getting acquainted with the expectations and pressing needs of Montana producers, the MAES research team and their potential cooperative research expectations and opportunities, and the resources available at CARC and the rest of MAES.

The CARC has up graded its analytical lab to facilitate assessing soil samples for the presence of nematodes. Research Associate Shabeg Briar has overseen the lab up grade. Nematode counts are being completed on 26 of the 83 fields at the CARC to determine if short term and long term crop rotations have influenced nematode species and numbers. At least one field appears to have much higher nematode numbers.

Renovations to the 1908 house are being completed to facilitate having individual sleeping quarters for four students with a kitchen, shower and laundry on the second floor and a two bedroom apartment on the first floor, also with a kitchen, shower and laundry. The renovation should be completed by mid-April, with additional upgrades to the north porch and roof eaves to be completed after the interior work.

Research summary presentations were made at winter Extension and Ag industry meetings on Safflower variety performance and production methods; Dryland alfalfa response to P, K and S fertilizer and S fertilizer sources; Annual and perennial forage species yield performance; and Using annual forages to reduce N leaching through increased soil water use.

New hires to the CARC include: 1) Simon Fordyce, who will be joining the center on April 19th as the new Cropping Systems Research Associate, 2) Sherry Bishop, who has been hired as a part-time Ag Field Tech on and 3) Heather Fryer, who has been hired as a seasonal employee supporting the nematode research.



*Sept 2015 seeded winter peas on Mar 29, 2016*

## *News from Northwestern*

Most activities at NWARC have centered on outreach activities and LRBP projects. We organized a Crop Update meeting in early February. Financial help from area sponsors enabled us to hold the meeting at the Red Lion Inn in Kalispell. The meeting was attended by 65 local producers and included a number of guest speakers. The meeting covered a range of topics including irrigation scheduling, herbicide resistance, insect management, and managing costs of production. Jessica was also asked to speak on irrigation management at MABA/MGEA and MT Water Resources Association annual conventions.

The staff has spent a considerable amount of time planning and reviewing versions of the LRBP projects. Projects include construction of a new pesticide handling facility, a new maintenance shop, a new irrigation system, and a drainage project. The irrigation system and drainage project have been put on hold, but we will continue to provide updates as things progress. While we wait for new construction to begin, we decided to deconstruct the old farm house, footage of which can be seen on our Facebook page at <https://www.facebook.com/Northwestern-Agricultural-Research-Center-122663507860352/?fref=nf>.

Olin Erikson is our newest employee. Olin received a B.S. in 2003 from MSU in Plant Science as well as a B.S in 2012 from MSU in Sustainable Food and Bioenergy Systems.



## News from Northern

The staff at the NARC excitedly watched the construction of their new pesticide storage building over the winter. Made possible by the 2015 Montana State Legislative Authority and local grass root support, the new building helps to provide for regulatory compliant and safe handling and storage of pesticides and animal care products. The building is near completion, with only minor finishing details left. Please visit <https://www.facebook.com/Northern-Ag-Research-Center-214958618534976/> to see additional photos of the build.



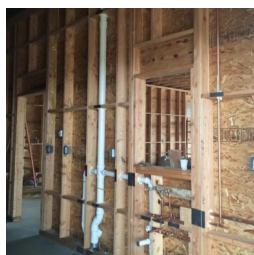
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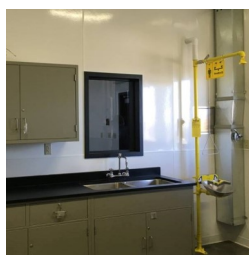
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In livestock news, the NARC staff brought the herd home in the midst of a snow storm this January and have been busy calving. Christy Hagler, Ag Liaison for Congressman Zinke, visited NARC and was put to work helping deliver a calf during her visit on March 22nd. Following that, the NARC hosted the Farmer's Union on April 2nd, where they toured the barns and learned cattle handling techniques. Darrin Boss then gave a cover crop presentation at their 2016 Young Producer Conference on April 4th.



Bringing the cows home January 2016



Christy Hagler and her calf



Farmer's Union tour NARC

## News from Southern

Faculty and staff at the SARC have had an exciting and fruitful spring. Dr. Prashant Jha received confirmation that his P&T submission was approved and he has been promoted to the rank of Associate Professor. In addition, he also received the "Outstanding Early Career Weed Scientist Award" from the Western Society of Weed Science in March at the Annual Western Society of Weed Science conference at Albuquerque, NM. At the same conference, Dr. Jha's PhD student, Charlemagne A. Lim, received the first place award for the graduate student poster contest. Congratulations for an excellent spring, Prashant and Charlemagne!

## *News from Eastern*

The EARC has added the following employees to their staff: 1) Dr. Maninder Walia has been hired as a Postdoc Research Associate and joined the EARC on April 21 to conduct research on pulse crop nitrogen fixation and soil lime amendment projects, and 2) Benton Carr started at EARC on March 1st as a Farm Mechanic. The EARC is also bringing four candidates to the area to interview for the Assistant Professor of Plant Pathology position. The candidates will be in the area the first two-weeks of May and the center hopes to have a hire made before the end of FY16. Please contact Shana Wold at 406.994.7289 or Cherie Gatzke at 406.433.2208 for dates and times.

In student news, Michael Bestwick, a M.S. graduate student co-advised by Rick Engel and Chengci Chen, passed his thesis defense on March 21, 2016. Mike has started a new job with Dr. Perry Miller at LRES Department. In addition, Carlos Remero, another M.S. graduate student co-advised by Rick Engel and Chengci Chen, has recently enrolled into a Ph.D. program. Carlos received a M.S. degree in Soil Science in 2015 from Argentina and he is expected to complete his Ph.D. program in June 2017.

## *News from Western Triangle*

Dr. Gadi V.P. Reddy, Superintendent and Associate Professor of Entomology/Insect Ecology conducted a workshop titled **Biological Control in the Northern Great Plains-Providing Tools for Agricultural Professionals** on March 1-2, 2016 in the Best Western Heritage Inn, Great Falls. The workshop was part of an on-going Western SARE Professional Development Project that was initiated last summer. It was designed to build an agricultural professional understanding of biological control techniques in order to incorporate them into current integrated pest management programs in Northern Great Plains. The workshop was attended by 50 participants including county extension agents, area stakeholders and staff from the research centers, and topics covered included various biological control factors, insect monitoring tools and techniques, and insect pathogens, to name a few. For a complete listing of topics discussed, including a list of speakers, please visit [agresearch.montana.edu/wtarc/fielddays-pdf/2016WesternSAREPDP.pdf](http://agresearch.montana.edu/wtarc/fielddays-pdf/2016WesternSAREPDP.pdf).



In addition to the SARE presentation, an abstract from Dr. Frank Antwi (post-doctoral research associate at WTARC), LM Sharma and Bob Peterson (Entomologist at MSU-Bozeman) titled 'Risk assessments for the insect repellents DEET and picaridin' was mentioned in a NY Times article titled, "DEET Seen as Safe for Pregnant Women to Avoid Zika Despite Few Studies". The full article is available at: <http://www.nytimes.com/2016/04/05/health/zika-virus-deet-pregant-women-safety.html?ref=topics&r=1>.

## *Career Fair Representation*

The CARC was invited to be an interactive presenter at the Fergus High School career fair. Pat Carr, Pattie Carr, Shabeg Briar, and Heather Fryer gave presentation related to crops and human nutrition; how healthy soils are flourishing with organisms of which many, like nematodes, are only visible with the aid of a microscope; improving the conservation of water and soil with diverse cropping systems; and an Ag career can take you around the world and back to Montana.



Shabeg, Pat and Pattie Carr at Fergus High School Career Fair

## MAES Field Days



### MAES Field Days

CARC - Moccasin	June 21: 9:00 am
NARC - Havre	June 22: 4:00 pm
WTARC - Conrad	June 23: 8:00 am
SARC - Huntley	June 28: 9:00 am
EARC - Sidney	June 30: 9:00 am
Post Farm - Bozeman	July 7: 8:00 am
Hort Farm - Bozeman	July 7: 6:00 pm
NWARC - Creston	July 12: 2:00 pm
WARC - Corvallis	July 28: 4:00 pm

## Staff Corner

Southern Ag Research Center's Farm Foreman, Tom Fischer, received President Cruzado's Pure Gold Award on January 20. He was nominated by Superintendent Ken Kephart, who wrote the following:

Every college, every department, every facility at Montana State University has a "go-to" person that keeps things running smoothly (both literally and figuratively) and keeps people working together. At the Southern Agricultural Research Center near Huntley, that person is Tom Fischer. A graduate of NDSU with a degree in soil science, Tom has served MSU and SARC for over 32 years in various capacities. His greatest impact has come from his serving as "Farm Foreman" of SARC since 1998.

For the past 18 years, he has been responsible for all general farm operations and maintenance of the facility. Unofficially, he often takes on the responsibility of the caring and feeding of the research center's PhD project leaders, making sure the research agenda is served first and that all field research is deployed in an efficient manner. He routinely serves as adviser to the research technicians and support staff, most of whom have degrees more advanced than his own. He is tireless in mentoring, always willing to share his knowledge, leads by example, and possesses a remarkable degree of patience that can only be described as biblical. He has been most instrumental in resurrecting this facility from the burned-out hulk it became during the dark days of closure from 1995 to 1998 to the modern research center that functions today as part of the Montana Agricultural Experiment Station in serving MSU's land-grant mission. He is most influential with the youngest and least experienced of SARC's employees, the part-time and student labor employees who have little or no experience in the workforce and seldom understand the importance of developing a positive work ethic at this stage in their lives.

In addition to his responsibilities to MSU, he is a devout husband, father, grandfather, US Army veteran, and follower of his faith. Tom has been an inspiration to all he has worked with at the Southern Agricultural Research Center. We are lucky to have him as our colleague/friend.

**Congratulations, Tom!!**

