Farmer to Farmer Mentoring: Multi-Media Case Studies Build Adaptive Capacity for Producers Across the Inland Pacific Northwest

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Abstract



Across our region, farmers are adopting innovative practices that increase resiliency in the face of ever-changing market pressures and continuing climate uncertainty. To support farmer to farmer learning, a set of multimedia producer case studies have been developed with support from land grant universities across the Pacific Northwest as part of the Regional Approaches to Climate Change in Pacific Northwest Agriculture (REACCH-PNA) project.

To support this process, we have developed multimedia producer case studies for cereal-based cropping systems in the Pacific Northwest. Case studies span both irrigated and dryland cropping areas, and highlight a range of innovative strategies that enhance resiliency.

Each case study includes a short (5-7 minute) video, and a more detailed written profile. The written profile includes details from growers on how participants successfully adopted these practices, their perspectives on benefits and challenges, and their thoughts on risk and climate change. Sidebars (approximately 6 per case study) are used to address additional topics in a trans-disciplinary manner. For example, the case study on precision agriculture includes a sidebar that describes ongoing on-farm research into nitrogen dynamics, and explains potential farm-level implications. Meanwhile, another sidebar provides details on fertilizer cost savings achieved using precision agriculture tools.

Final video and written case studies can be found at:

www.casestudies.reacchpna.org.

Case Study Locations and Themes



Mustard Cover Cropping Irrigation, Dale Gies, Moses Lake, WA



Precision Nitrogen Application, Eric Odberg, Genesee, ID

Integrating

Cover Cropping

and Livestock

Production,

Drew Leitch,

Nez Perce, ID



Tillage in Winter Wheat-Fallow, Ron Jirava, Ritzville, WA



● Echo, OR

Craigmont and

Crop Diversity,

Steve & Becky

LaCrosse, WA

Camp,



Stripper Header, Ron & Andy Juris, Bickleton, WA



High Residue

Irrigation,

Eric & Alan

Williamson,

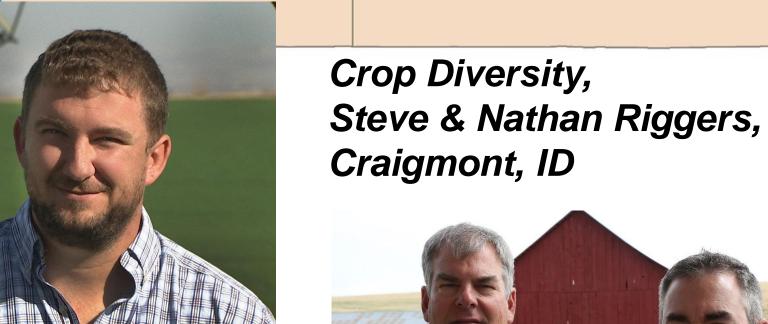
George, WA

Farming Under

Flex Cropping, Bill Jepsen, Ione, OR



Deficit Irrigation, Jake Madison, Echo, OR

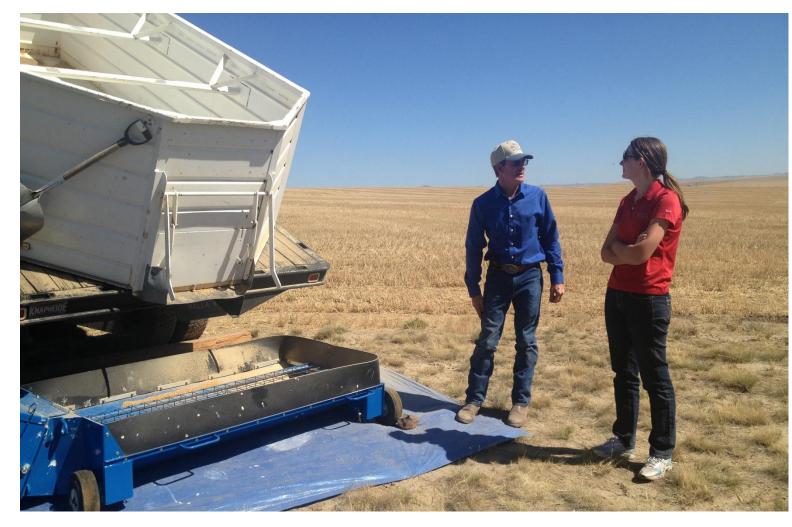


Nez Perce, ID

Project Background: The Power of Peers

While early climate impact assessment studies (Adam et al. 2012; Stockle et.al. 2010) have prioritized agricultural concerns related to climate change, scientists have so far been able to provide only generalizable recommendations regarding adaptation strategies (e.g., develop new plant varieties, new crop protection tools, more farmer innovation). With continuing climate uncertainty, farmers who are already adopting innovative practices can provide insights into their resilient management practices for the rest of the agricultural community.

Adapting to climate change will require the development and use of knowledge and a capacity for collective learning and innovation (Berkhout et al. 2006). Farmer-to-farmer learning through case studies has been shown to develop personal and collective responses for adaptation and strengthen knowledge transfer through social networks (Röling & Wagemakers 1998; Hemstead et al. 2012; Mills-Novoa 2011). Our case studies build on the established trust of peers, focusing on mitigation and adaptation strategies already being used by ground-breaking farmers in the inland Pacific Northwest.



Written case studies are available for five of the ten case studies, and videos are available for eight. The remaining two videos and five written case studies are in the final stages of completion. The videos have been popular and widely used by a variety of stakeholders, with viewings at regional agricultural conferences. The videos have also generated interest in the written publications and associated research.

Literature Cited

Adam, J.C., M.E. Barber, M.P. Brady, K. Rajagopalan, C.S. Stockle, C.E. Kruger, R. Nelson, K. Chinnayakanahalli, K. Malek, S. Dinesh, J. Yoder, and G.G. Yorgey. 2012. 2011 technical report for the Columbia River Basin long-term water supply and demand forecast. Publication No. 12-12-001. Washington Department of Ecology, Olympia, WA.

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Röling, N. G., and M. A. E. Wagemakers, editors. 1998. Facilitating Sustainable Agriculture: Participatory Learning and Adaptive Management in Times of Environmental Uncertainty. Cambridge University Press, Cambridge, UK and New York, New York, USA.

Stöckle, C.O., R.L. Nelson, S. Higgins, J. Brunner, G. Grove, R. Boydston, M. Whiting, and C. Kruger. 2010. Assessment of climate change impact on Eastern Washington agriculture. Climate Change 102(1-2):

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