Published

Journal Article, Academic Journal

Scopus Metric Year: 2019 | Category: Agronomy and Crop Science | CiteScore: 0.8 | Highest Percentile: 25 | Rank: #/N: 249/334 | SNIP: 0.475 | SJR: 0.247
Author Role: Dr. Bradley participated in project conceptualization; critically reviewed and revised the manuscript. Dr. McNeill provided input in the experimental design and drying tests and reviewed the manuscript.


Author Role: Turner: Experiment design, data acquisition, data analysis, methodology, manuscript development and editing
Sama: Funding acquisition, experiment design, manuscript development and editing
McNeill: Conceptualization, methodology, writing, review and editing
Dvorak: Conceptualization, methodology, writing - review and editing
Mark: Conceptualization, methodology, writing - review and editing
Montross: Conceptualization, methodology, experiment design, writing - review and editing


**Sponsored Projects**

**Closed**

OSPA ID: 201904091141

OSPA ID: 201902151109

OSPA ID: 201504031335

McNeill S., G., Alliance for Food Security Through Reduction of Postharvest Loss and Food
OSPA ID: 201404131437

OSPA ID: 201501131153

OSPA ID: 201410291656

OSPA ID: 201704141435

OSPA ID: 201703240812

Not Funded

Montross M., D., McNeill S., G., Training the Next Generation of Leaders for a Transforming Grain Industry, Sponsored by Purdue University Submitted: June 5, 2019. | Awarded: $0.00
OSPA ID: 201906051429

Active

Corbin, Kendall, Rodriguez Lopez C., M., McNeill S., G., The Grain or the Microbe? Understanding Wheat Compositional Changes During Storage, Sponsored by Kentucky Small Grain Growers Association Submitted: September 30, 2020. Requested: $15,098.00, | Awarded: $15,098.00 OSPA ID: 202009301315

Scope Grants

Closed


Presentations Given

Invited Speaker

McNeill S. G., (November 4, 2019). Engineering opportunities to reduce post-harvest losses in Sub-Saharan Africa. BAE 400 class - senior seminar, Biosystems & Agricultural Engineering, Lexington, KY, United States. Invited, Department.

Podium Session


Poster Session


Extension

Extension Publications & Media

* = Senior Author  ~ = Corresponding Author  + = Grad/Prof Student  # = Post Doc  ^ = Undergraduate

Accepted

Peer-Reviewed

Extension Publication- Numbered, Original Content


Author Role:
Dr. McNeill provided information on the recommended storage moisture levels for various grains in Kentucky and reviewed the publication.

Extension Presentations Summary

Description: Grain and hemp drying and storage topics were presented at these in-state meetings. Additional, individual presentations at out-of-state meetings are listed in the section on training programs. | Presentations: 9 | Participants: 263.

Extension Education & Training Programs

County Agent In-Service Training

Description: Grain storage systems and management strategies were presented and discussed, including conventional and temporary storage structures for small quantities and SLAM (and IPM approach for managing stored grain).

Participants: 4 County agents/ specialists.
Description: Presented an overview of available resources in the BAE Department to new extension agents during their orientation program.

Field Day Presentation
Description: Grain storage systems and management strategies were presented and discussed, including conventional and temporary storage structures for small quantities and SLAM (and IPM approach for managing stored grain).

Description: Grain storage systems and safe management strategies were presented and discussed, including conventional and temporary storage structures, aeration strategies and SLAM (and IPM approach for managing stored grain). This was a virtual meeting, so my presentation was uploaded to their system.

**Multi-modal Program (describe in description box)**

Description: Bi-weekly conference calls to plan and discuss project activities.

**Committee member.** Grain packing consortium. (January 1, 2017 - Present). Scope: Multi-state.
States: 4. Participants: 6 Interest group members.
Description: Monthly conference calls to plan and discuss project activities.

Description: Attend virtual technical sessions on grain drying and storage systems, network with counter-parts in other US states and other countries.

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**Other Extension Presentation**

Description: A one hour webinar was presented by university and industry leaders to discuss grain storage management and included an informative Q & A session.

**Seminar**

Description: Grain storage systems and management strategies were presented and
discussed, including conventional and temporary storage structures for small quantities and SLAM (and IPM approach for managing stored grain).

Description: Grain storage systems and management strategies were presented and discussed, including conventional and temporary storage structures for small quantities and SLAM (and IPM approach for managing stored grain).

**Workshop**

**Committee member.** Annual Meeting Feed the Future IL for the Reduction of Postharvest Losses. (August 6, 2020). Scope: International. Participants: 38 Interest group members. Description: Network with engineers and other scientists on other teams to evaluate grain drying and storage systems in Bangladesh, Ethiopia, Ghana and Guatemala.

**Multiple roles (describe in description box).** Quarterly Meeting of the AMPLIFIES-Ghana Team. (April 2, 2019 - April 5, 2019). Scope: International. Participants: 17 Interest group members. Description: Provide technical assistance to evaluate different drying and storage systems, network with engineering counter-parts and other scientists in the US and other countries.

**Extension Related Consulting**

Description: Conducted an assessment of 12 Crop Aggregation Centers (CACs) in Ghana (in the Northern, Brong Ahafo, and Ashanti Regions); inspected each grain storage warehouse and meet with members of the management committee to evaluate current performance and readiness to sustain activities, then provide feedback and recommendations.

Conducted six farm visits (June 10, 2019 - December 10, 2020).
Description: Provide technical assistance on grain handling, drying, and storage systems to accommodate expansion plans. Four lead to energy audits for handling and/or drying systems for more equipment that is more energy efficient, and two involved layout options for storage bins. The total investment cost for all projects was over $953,000 (or $159,000 per farm on average).

Description: Provide technical assistance by conducting energy audits for solar installations in Butler, Christian, Daviess and Meade Counties. The total investment cost for these projects was $120,800 (or $30,200 per farm).

**Professional Service**

**Committee Member**

NC-213, Annual Meetings (in person)., (February 22, 2015 - Present).
American Society of Agricultural and Biological Engineers, Extension (EOPD-208)., (August 1, 2002
Officer, President/Elect/Past

NC-213, 2019 Annual Meetings (in person) and quarterly meetings (via phone conference), (February 28, 2017 - February 28, 2019).

Reviewer, Journal Article


Extension Media Summary

<table>
<thead>
<tr>
<th>Type of Media</th>
<th>Dates</th>
<th>Faculty Member’s Role</th>
<th>Description</th>
<th>Evidence of Reach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Press</td>
<td>January 1, 2019 - December 31, 2020</td>
<td>Contributor</td>
<td>I have provided 6 articles on grain harvest management, drying costs and storage management.</td>
<td>UK CAFE News Releases go to 120 county extension offices and local newspapers plus newspapers in neighboring states.</td>
</tr>
<tr>
<td>Television</td>
<td>January 1, 2019 - December 31, 2020</td>
<td>Contributor</td>
<td>Recorded 8 programs on WBKO's &quot;Farm and Home&quot; program with Joanna Coles.</td>
<td>WBKO audience is estimated at 20,000+ viewers.</td>
</tr>
</tbody>
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Teaching

Theses and Dissertations

Dissertation Committee Co-Chair


Master’s Thesis Committee Member

Kehinde Bababode, Postharvest processing, "Effects of storage on wheat milling quality parameters.," Status: Proposal, Dr. Michael Montross, Dr. Kendall Corbin, Dr. Carlos Rodriguez Lopez. (August 2020 - Present).

Service

Department Service
Committee Chair


Committee Member

   Extension, (August 1, 1979 - Present).
   Awards Committee, (January 1, 2018 - December 31, 2019).

College Service
Committee Chair

   Promotion and Tenure Review Committee, (July 1, 2019 - Present).

Committee Member

   Promotion and Tenure Review Committee, (July 1, 2019 - Present).
   Hemp Working Group, (January 1, 2019 - Present).
   KATS Training Group, (January 1, 2018 - Present).
   International Working Group, (January 1, 2012 - Present).
   Corn and Soybean Science Group, (January 1, 2004 - Present).
   Wheat Science Group, (January 1, 1997 - Present).

Professional Service
Committee Member

   American Society of Agricultural and Biological Engineers, Grain and Feed Processing and Storage (PRS-702), (January 1, 1982 - Present).

Professional Development

Professional Memberships

   American Society of Agricultural and Biological Engineers. International. (June 1, 1979 - Present).
   Kentucky Association of State Extension Professionals. State. (February 1, 1979 - Present).

Awards and Honors

*Wethington Award*, University of Kentucky. Scholarship/Research/Creative, Wethington Research Excellence Award, University. (May 31, 2020).

*Wethington Award*, University of Kentucky. Scholarship/Research/Creative, Wethington Research Excellence Award, University. (May 31, 2019).

Licensures and Certifications

Licensure

Professional Engineer, Number: 21820, Kentucky State Board of Licensure for Professional Engineers and Land Surveyors, KY, United States. (July 1, 2020 - June 30, 2022).

Professional Engineer, Number: 21820, Kentucky State Board of Licensure for Professional Engineers and Land Surveyors, KY, United States. (July 1, 2018 - June 30, 2020).