2015 CCA NORTH AMERICAN BOARD MEETING

EXAMS AND PROCEDURES

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CCA Exams and Procedures

- What are we going to talk about today?
  - Review Goals and Objectives for the CCA Exam program.
  - Update on past year.
  - Procedures/options as we move forward.
  - Update on computer-based testing.
  - Motion from the Exam and Procedures Committee.
- Proposal for regions; 4Rs Exam.
CCA Exams: Goals and Objectives

• Consistency and Standardization across all exams.
• Compliance with Accepted Standards for credentialing exams.
• Operate and Maintain an Exam Program that is Legally Defensible.
CCA Exams - Update

• ICCA Exam
• 29 Local Board Exams
• 1 Specialty Exam currently (4Rs)
  • Sustainability – coming Feb. 2016
  • IPM – in committee
  • Mexico Exam

Other:
India – suspended
Soil Science (U.S and Australia) – 3 exams
Boards that have had some working contact with me (this doesn’t mean that they are all up to date):

- AR/LA/MS
- California/Arizona
- CA Manure Management
- Kansas
- Michigan
- Mid-Atlantic
- Minnesota
- North Carolina
- Northeast Region
- Oklahoma
- Ontario
- Prairie Provinces
- Rocky Mountain Region
- Southeast Region
- Tri-State
- Wisconsin

Boards that I have not talked to yet (or nothing significant has been done with that Board if I have):

- Atlantic Provinces
- Colorado
- Iowa
- Kentucky
- Missouri
- Nebraska
- New Mexico
- North Dakota
- Northwest Region
- Pennsylvania
- South Dakota
- Texas
CCA Exams - Update

• ICCA is meant to be the “base” exam. Tests fundamental concepts, knowledge and application of agronomy.
• Local board exams should test more specific knowledge of a state/province or region.
• Working towards standards and consistency across all exams.
• 100 questions on Local Board Exams
• 4 Sections (NM, SW, PM, CM)
Performance Objectives

• POs are free to download from the CCA website for all exams.
• Major sections are divided into competency areas, with objectives within each competency area.
• This structure is important to understand with respect to the exam software – Authorize.
• Each exam question must be linked to one (and only one) PO.
Working together

• Start from the current status of the exam.
• This is a partnership and we will be working together with everyone to update procedures within and across programs.
• First step is to assess where the program is and move forward from there.
• Have worked with:
  • EPC
  • 16 Local Boards
  • Mexico
  • Specialty Exams
Workflow for Exams

- Update Performance Objectives
- Perform a Job Task Analysis (JTA)
- Determine exam partitioning from JTA
- Update exam
- Perform an Angoff analysis to set a cut score
- Work with and learn item statistics

- Training in Authorize – throughout process
- Note: Authorize is becoming Authorwise
  - Will be web based, which will make using the software much easier - no more Active X issues!
Legally Defensible Exams

• Use the Angoff analysis to set a cut score for the updated exam.
• We will lead this process, supported by our psychometrician.
• Completed every 4-5 years.
• Equating statistics used in-between.
• Learn to use item statistics to make decisions.
Procedures/Options as we move forward

- Major Local Exam Committee Functions
  - PO process.
  - Exam development and writing.
  - Provide an exam and supporting documentation in the correct format each year.
  - Finalize exam administration working with the staff to
    - review the item analysis.
    - approve or set cut scores.
  - Other duties as needed.
  - Example: Angoff analysis
Issues observed and Options Available

• Issue - Lack of resources
  • Exam committees
  • Consistency

• Options
  • Fee based option to have staff maintain exams.
  • Local Board and Exam Committee still involved.
  • Staff facilitates everything getting done.
Fee Structure

- ≤30 exams given per year
  - Flat fee of $500 per year

- >30 exams given per year
  - Fee of $17/exam

- Billed after the August exam administration.
- Start after the Local Board has been brought up to standards.
Update on Computer-based Testing

• Working on details with our psychometrician.
• Building a test driver for Authorwise that will allow us to export exams for administration.
• There will be several options available.
  • Checking the costs associated with each option.
• There will be a transition period.
• Those exams up to date will be available for this option first.
• More to come.
Questions?

Contact me at any time with questions:

dgibas@sciencessocieties.org
BUSINESS FROM THE EPC:

Motion made, seconded and passed:
Once either or both of the ICCA and Local Board Exam are taken and passed, the length of time a person must wait prior to retesting is 3 years.

16 members on the EPC
12 voted YES
4 did not respond
PROPOSAL FOR THE 4RS NUTRIENT MANAGEMENT SPECIALTY EXAM
First exam administration in August 2015.
63 CCAs took the exam; 51% passed.
Was offered to a limited area:
  - Michigan, Indiana, Illinois, Iowa, Minnesota and Wisconsin.
The exam is scenario based with 50 questions.
Issue with geography.
Need to consider regionalizing the exam.
Farm Resource Regions

Northern Great Plains
Heartland
Northern Crescent
Fruitful Rim
Basin and Range
Prairie Gateway
Mississippi Portal
Southern Seaboard
% of U.S. cropland within Farm Resource Region

- Wheat, canola, sheep farms.
- Cash grain and cattle farms.

**Prairie Gateway**
- Second in wheat, oat, barley, rice, and cotton production.
- 13% of farms, 12% of production.

**Mississippi Portal**
- Part-time crop, amount very small.
- 11% of farms, 9% of production.
**Farm Resource Regions X Water Resource Regions**

- **Prairie Gateway**
  - Second in wheat, oat, barley, rice, and cotton production.
  - 13% of farms, 12% of production.

- **Mississippi Portal**
  - Mix of crops and livestock.
  - 11% of farms, 7% of production.
  - Part-time farms with some crop, dairy, and livestock.
Aquifers: Map of the Principal Aquifers of the United States
http://water.usgs.gov/ogw/aquifer/map.html
Figure 6. (A) Nitrogen inputs during 1992 and (B) average annual nitrogen yields of streams for 1980–96 (modified from Goolsby and others, 1999).
Climate

Climatic regions in the United States (adapted from Figure 2, ASAE Paper 82-4034)
Total Certified
CCAs 13,184
CPAg 523
CCA Retired 131
CPAg Retired 17
CCA Candidates 109