

# Growing Your Career with the CCA Precision Agriculture Specialty Certification

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Certified Crop Adviser Program

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# Outline

- Certified Crop Adviser (CCA) program
  - Background
  - Certification
- Precision Agriculture Specialty Certification (PASp) specifics
  - Background
  - Performance objectives
  - Certification
  - Career growth
  - Exam preparation
- Authorship opportunity
- Key resources



# CCA Program Background

- Administered by the American Society of Agronomy (ASA)
- Established in 1992 as a benchmark for practicing agronomy professionals in the United States and Canada
- Consists of a network of more than 13,000 individuals
- Designed for protection of the public and the profession
- Serves as a voluntary professional enhancement
- Respected by industry, academia, and government entities
- Focused on key performance objectives and competency areas
  - Nutrient management
  - Soil and water management
  - Pest management
  - Crop management

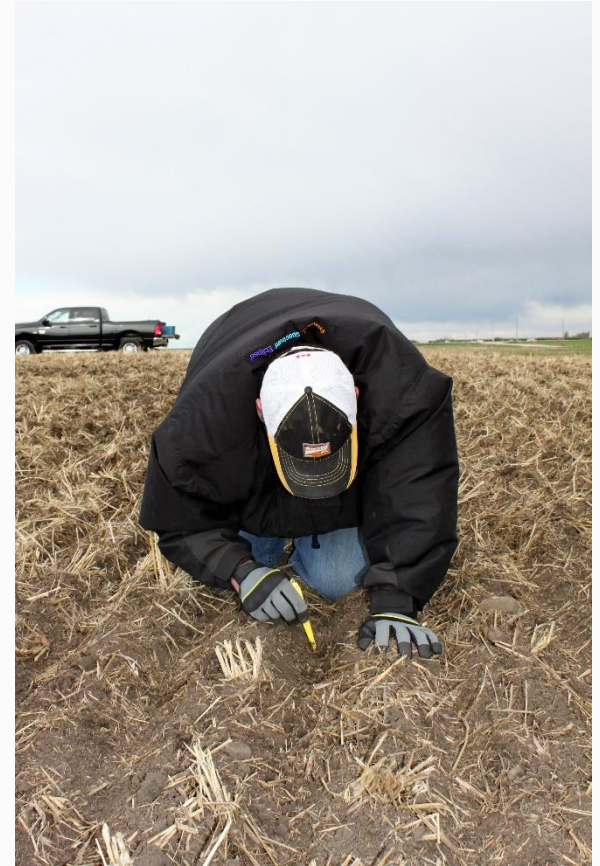
INTERNATIONAL CERTIFIED CROP ADVISER PERFORMANCE OBJECTIVES	
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<b><u>NUTRIENT MANAGEMENT COMPETENCY AREAS:</u></b>	<b>3</b>
1. Basic Concepts of Plant Nutrition	
2. Basic Concepts of Soil Fertility	
3. Soil Testing and Plant Tissue Analysis	
4. Nutrient Sources	
5. Nutrient Placement and Timing	
6. Soil pH and Liming	
7. Nutrient Diagnostics	
8. Nutrient Management Planning	
<b><u>SOIL AND WATER MANAGEMENT COMPETENCY AREAS:</u></b>	<b>12</b>
1. Basic Soil Properties	
2. Site Characterization	
3. Soil Erosion	
4. Residue and Tillage Management	
5. Restrictive Soil Layers	
6. Soil Management Effects on Air Quality	
7. Water and Solute Movement	
8. Soil-Plant-Water Relations	
9. Irrigation and Drainage	
10. Water Quality	
<b><u>PEST MANAGEMENT COMPETENCY AREAS:</u></b>	<b>21</b>
1. Basic Concepts of Pest Management	
2. Sampling and Monitoring	
3. Identification	
4. Decision-Making Guidelines	
5. Pest Management Strategies	
6. Environmental Stewardship	
7. Health and Safety	
<b><u>CROP MANAGEMENT COMPETENCY AREAS:</u></b>	<b>29</b>
1. Cropping Systems	
2. Hybrid and Variety Selection	
3. Crop Establishment	
4. Crop Growth, Development, and Diagnostics	
5. Applied Information Technologies	
6. Harvest and Storage	
7. Crop Production Economics	

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# CCA Program Certification

- Pass two comprehensive exams
  - International and local
  - Performance objectives and competency areas
  - 60% passing rate
- Meet the experience requirements
  - At least two years of experience with a B.S. in agronomy or a related field
  - At least three years of experience with an A.S. in agronomy or a related field
  - At least four years of experience with no degree
- Complete the CCA application
- Earn 40 hours of Continuing Education Units (CEUs) every two years in key competency areas
- Pay an annual renewal fee



# PASp Background

- Developed by the CCA program based on repeated CCA and industry requests
- Designed for meeting the growing demand for qualified advisers with knowledge and skills in precision agriculture
- Focused on demonstrating a CCA's proficiency in working with precision agriculture concepts and technologies within a holistic management model
- Falls under the major pillars of CCA knowledge
  - Nutrient management
  - Soil and water management
  - Pest management
  - Crop Management



# PASp Performance Objectives

- Proficiency area 1: Precision agriculture: approach, concepts, and general process/cycle
  - Competency area 1. General concepts
  - Competency area 2. General approach and processes
- Proficiency area 2: Data collection, tools, and technology
  - Competency area 1. Spatial and temporal data
  - Competency area 2: Use of tools and sources of information
- Proficiency area 3: Data analysis and prescriptions
  - Competency area 1: Data analysis to develop recommendations
- Proficiency area 4: Communication, evaluation, and adjustment
  - Competency area 1: Economics of precision agriculture, evaluation of site-specific management, and return on investment
  - Competency area 2: On-farm evaluation basics (trials and field surveys)



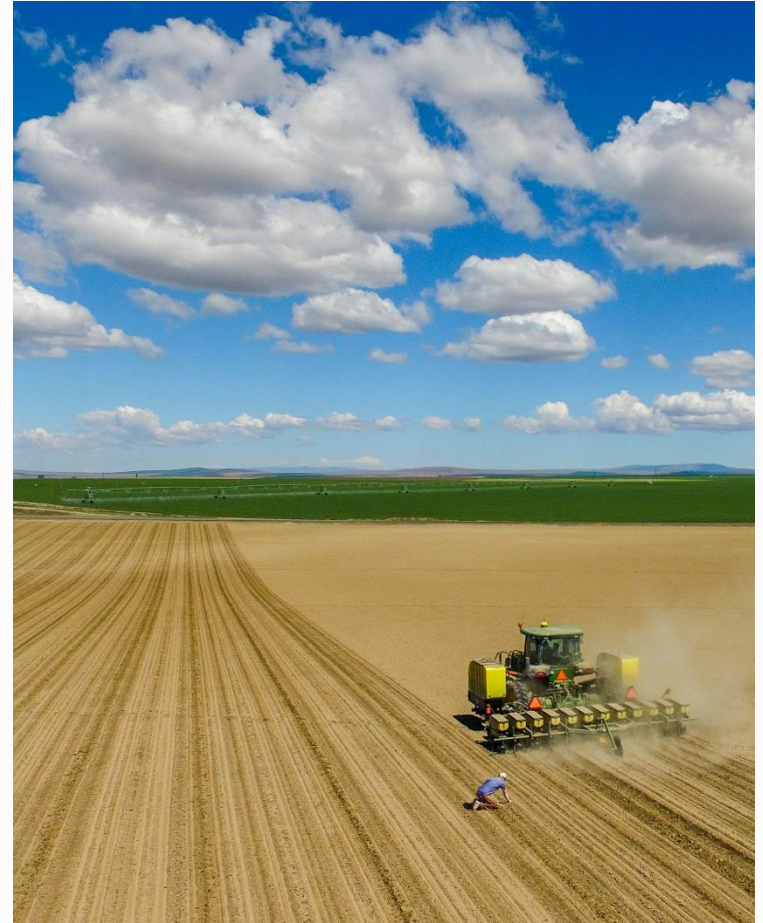
# PASp Certification

- Not currently offered in Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Ontario, Prince Edward Island, and Saskatchewan
- Must be a CCA before registering for the PASp exam
- Requires an annual PASp maintenance fee in addition to an annual CCA renewal fee
  - Changing
  - \$155 exam cost
- Need to earn five CEUs in precision agriculture
- Still need 40 total CEUs every two years
- No change in CEU requirements in the key competency areas
- Offered only through remote proctoring
  - Next exam date: February 7, 2020
  - Registration period: October 7, 2019-December 20, 2019



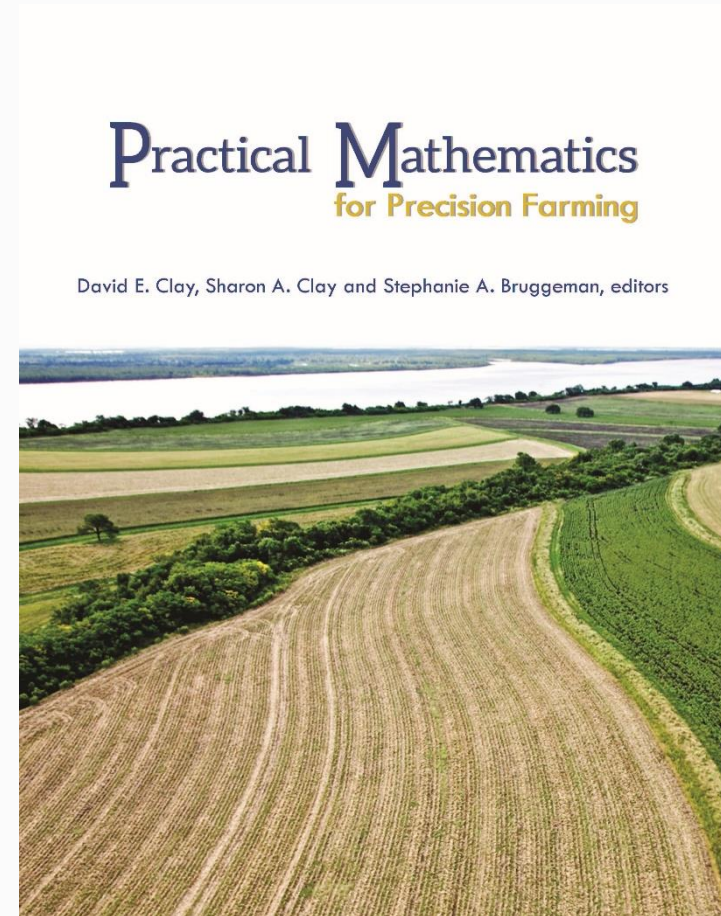
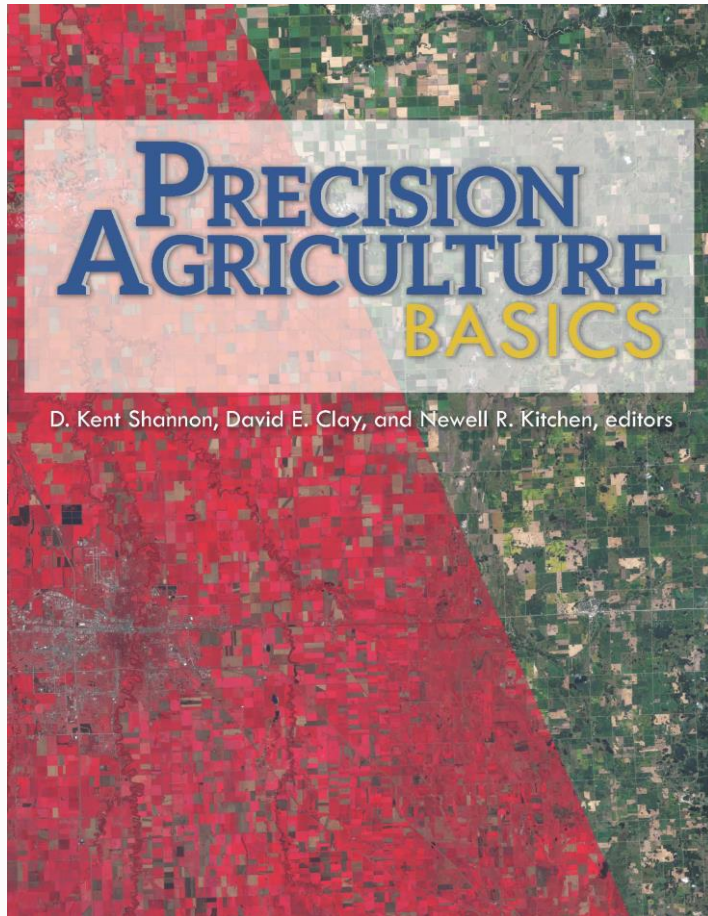
# PASp and Career Growth

- Allows CCAs to meet a strong industry demand for precision agriculture expertise
- Allows CCAs who advise on precision agriculture to become more visible and recognized for their integrated systems thinking and approach and precision agriculture knowledge and skills
- Shows a CCA can work with complex technologies and integrate them with agronomic advice
- Demonstrates a CCA is current in the rapidly changing field of precision agriculture
- Establishes a CCA as a go-to resource for on-farm technology issues





# PASp Exam Preparation



# Authorship Opportunity

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# Key Resources

- CCA program
  - Homepage: <https://www.certifiedcropadviser.org/>
  - Performance objectives: <https://www.certifiedcropadviser.org/files/certifiedcropadviser/international-performance-objectives.pdf>
- PASp specifics
  - Homepage: <https://www.certifiedcropadviser.org/pasp>
  - Performance objectives: <https://www.certifiedcropadviser.org/files/certifiedcropadviser/precision-agriculture-performance-objectives.pdf>
- Exam information: <https://www.certifiedcropadviser.org/exams>
- CCA CEU classroom: <https://www.certifiedcropadviser.org/education/classroom>
- Helpdesk: <https://www.certifiedcropadviser.org/contact>
- InfoAg conference: booth #27



# Questions or Suggestions?



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