HAIL KNOW

NEBRASKA EXTENSION

Tyler Williams
Nebraska Extension Educator

cropwatch.unl.edu/hailknow
@HailKnowUNL

EXTENSION

Corn Expo

January 3rd, 2019

Hail Know: A New Resource Package

Overview

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Meet the Team

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Overview of the Hail Know project

June 2014 hail event was the catalyst for this project

Challenge: Nebraska Extension has hail information, but it's located in many places

Opportunity: Repackage the information to make it appealing, accessible, and shareable

USDA NIFA funded the project for $41,000 from September 2015 to August 2018

United States Department of Agriculture
National Institute of Food and Agriculture

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Overview of the Hail Know project

Nebraska has one hail of a problem…

2014	2015	2016	2017	2018
• **624** events • **#1** rank	• **458** events • **#3** rank	• **376** events • **#3** rank	• **420** events • **#3** rank	• **309** events • **#4** rank

NOAA National Storm Prediction Center, 2018

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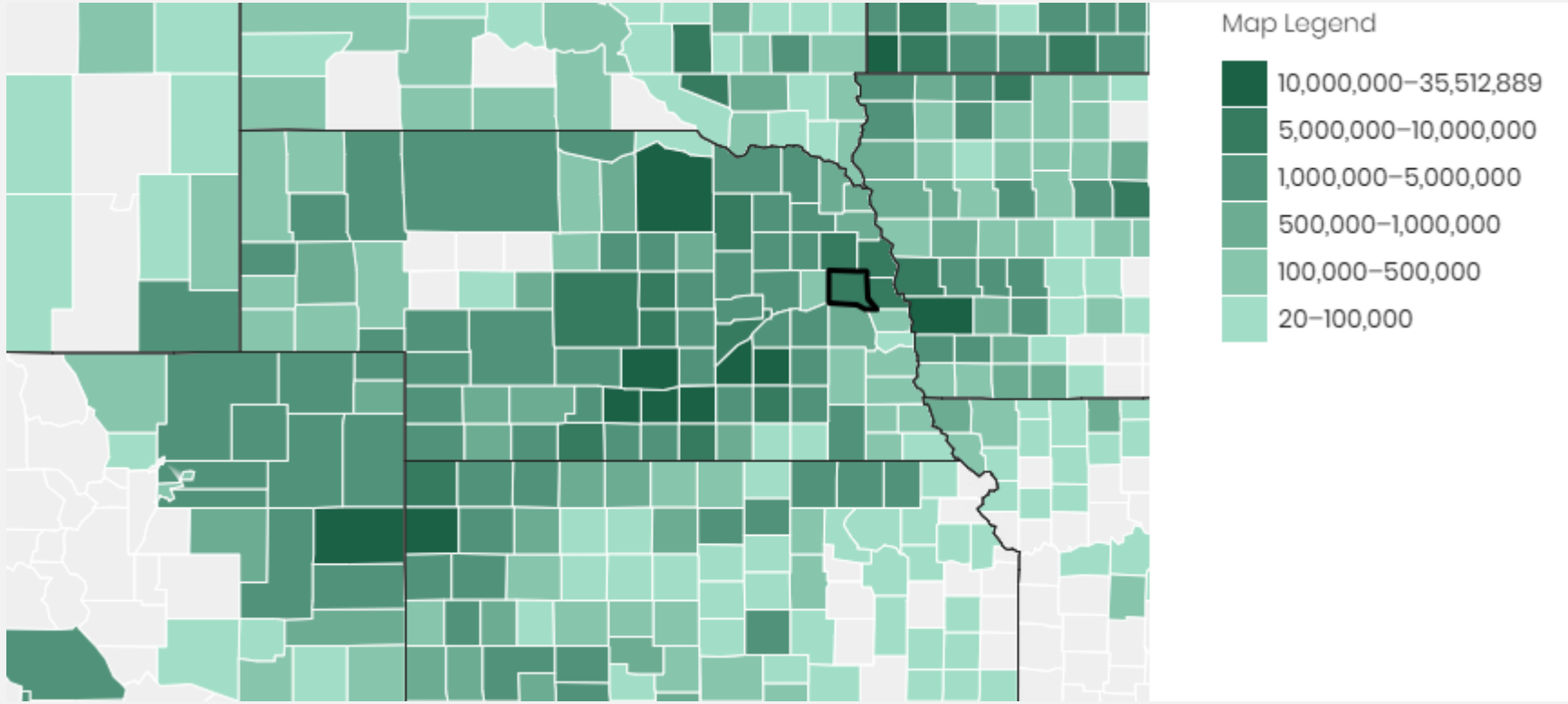
Overview of the Hail Know project

- 2014 Hail Indemnity Payments:
  - Dodge County: $7.9 million
  - Washington County: $5.6 million
  - Cuming County: $9.5 million
  - Burt County: $8.9 million
- *USDA Southwest Climate Hub – AgRisk Viewer*
  USDA Risk Management Agency



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Overview of the Hail Know project

Nebraska hail loss payments…..

Nebraska Hail RMA Payments	Highest County Payment (year)	Highest Payment Years	Highest Payment Counties
• $1.3+ billion in Nebraska hail indeminity payments (1989-2016)	• **Chase County (2011) – $37 million** • **Buffalo County (2014) - $35 million** • **Adams County (2014)** *$24 million* • **Clay County (2013)** *$15 million*	• **#1 – 2014** ($308 million) • **#2 – 2011** ($156 million) • **#3 – 2009** ($111 million) • **#4 – 2013** ($100 million)	• **#1 Chase County** *$74 million* • **#2 Buffalo County** *$54 million* • **#3 Lincoln County** *$54 million* • **#4 Perkins County** *$49 million* • **#5 Cheyenne County** *$46 million* • **#6 Box Butte County** *$43 million* • **#7 Dundy County** *$42 million*

USDA Southwest Climate Hub – AgRisk Viewer
USDA Risk Management Agency

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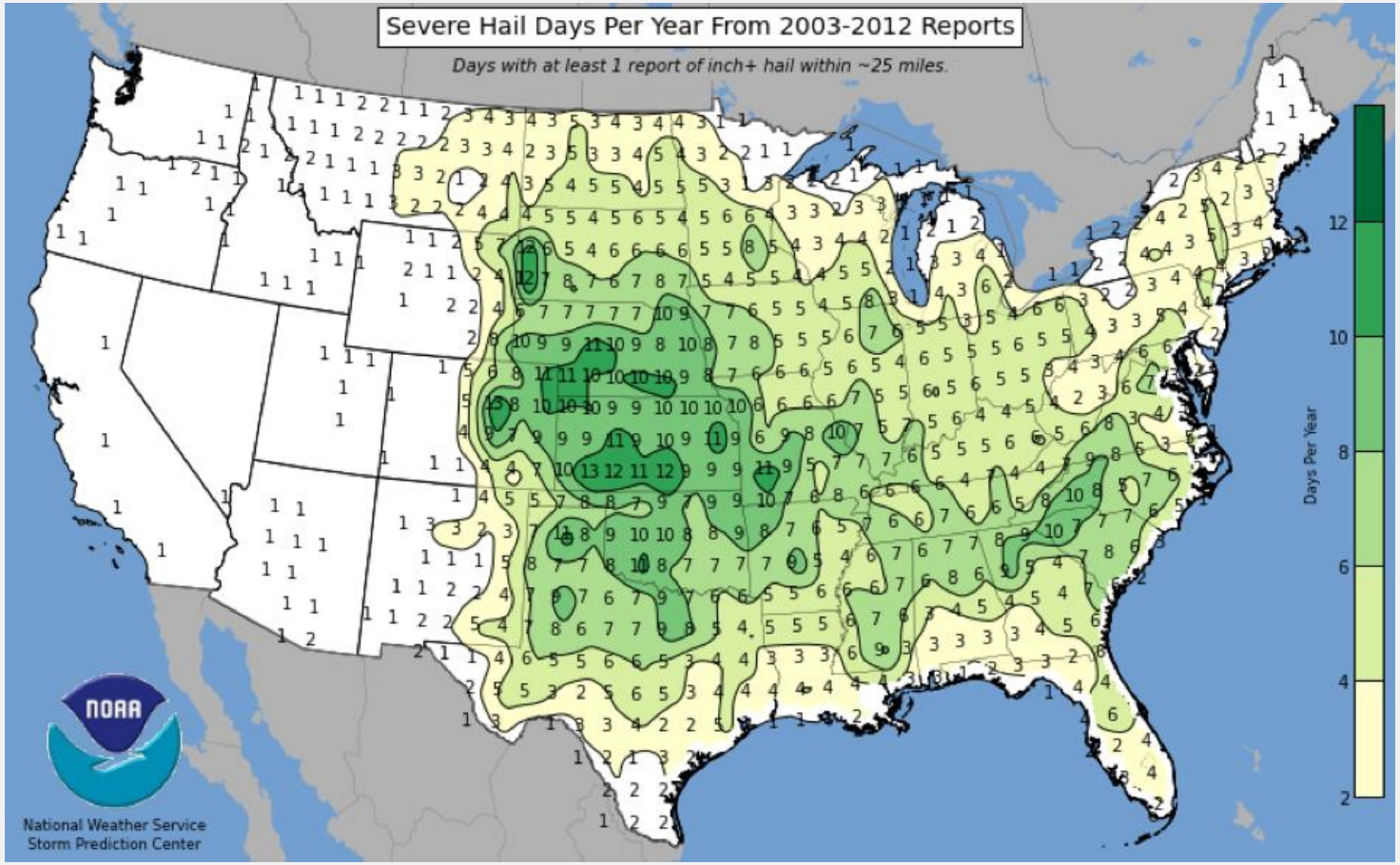
Overview of the Hail Know project

- June is most active month (Sept. avg. 25 reports from 2010-18)
- ~34% of reports are dime (3/4”) size
- <10% are 2” or greater
- Future: Fewer hail days expected, but 40% increase in damage due to larger hail in spring by mid-century

  - 4th National Climate Assessment



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Overview of the Hail Know project

- 1920 Journal – *Hailstorms in Nebraska*

A hailstone "7¼ inches in circumference" was reported at Hebron April 18, 1893, and one "7½ inches in circumference" at Nebraska City on September 5, 1898.

Average number of hailstorms each month.

Stations.	April.	May.	June.	July.	August.	September.	Seasonal.
Sioux City, Iowa	0.5	1.0	0.6	0.2	0.1	0.3	2.7
Omaha	0.8	1.1	0.5	0.2	0.1	0.4	3.1
Lincoln	0.8	0.7	0.5	0.4	0.4	0.3	3.1
York	0.8	1.1	0.6	0.2	0.2	0.2	3.1
Marquette	0.4	0.5	0.7	0.5	0.4	0.2	2.7
Genoa	0.4	0.8	0.5	0.4	0.2	0.1	2.5
Oakdale	0.4	0.9	1.2	0.4	0.3	0.4	3.6
Valentine	0.3	0.8	0.6	0.5	0.5	0.0	2.7
North Platte	0.4	0.8	0.5	0.6	0.5	0.1	2.9
Imperial	0.5	1.5	0.5	0.7	0.5	0.1	3.8
Kimball	0.1	0.7	1.9	0.9	0.8	0.2	4.6
Cheyenne, Wyo	0.5	1.5	2.6	1.3	1.2	0.9	8.0
Means	0.5	0.9	0.7	0.5	0.4	0.2	3.2

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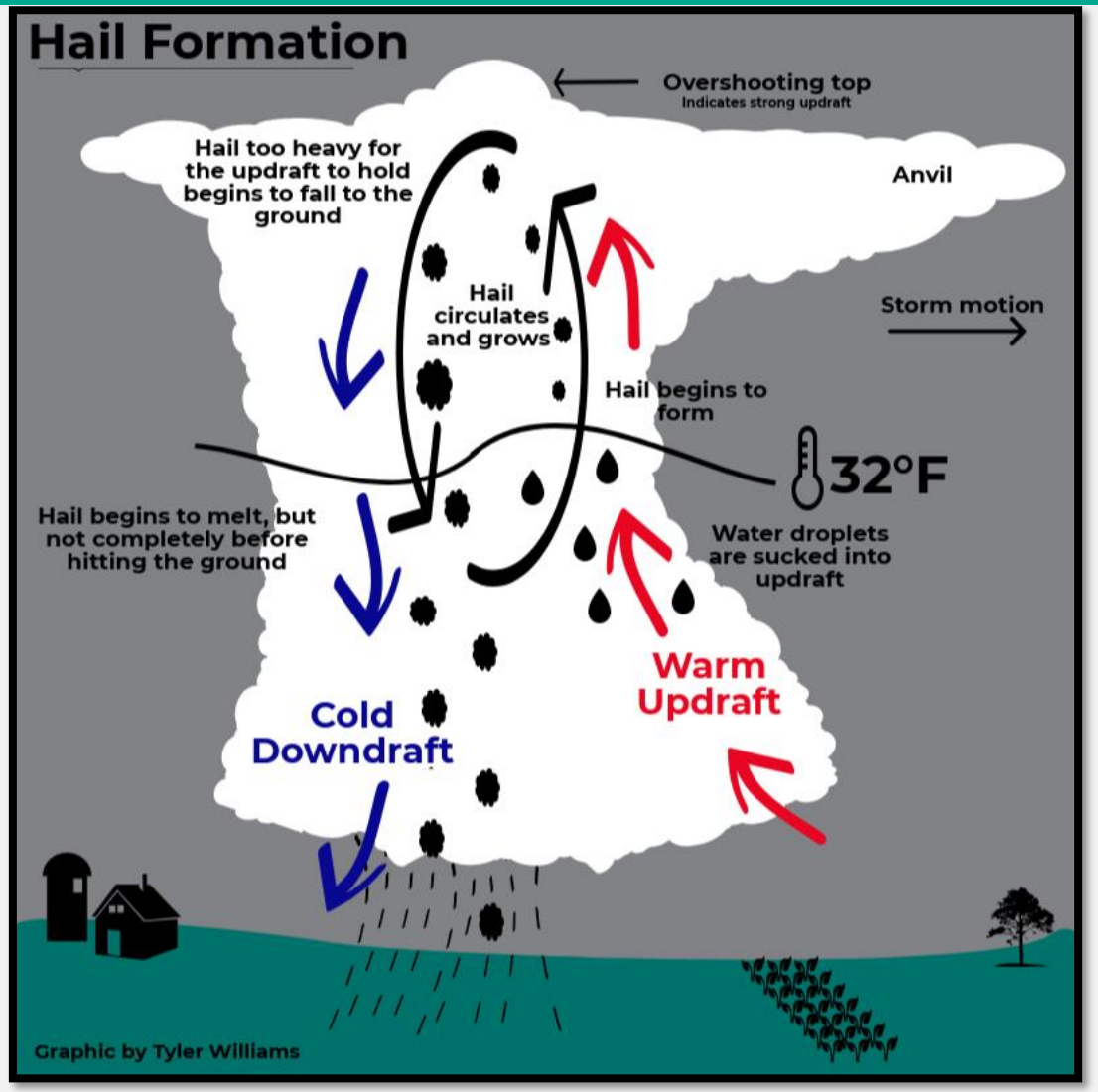
- Great Plains
- Highly variable
- Winds enhance damage
- 1-2” fall at 80 mph



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- Largest stone: 7”diameter (18.75” circumference) in Aurora (2003)

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Overview of the Hail Know project

Hail Know addresses six topic areas

- Hail Events & Damage
- Crop Damage Assessment
- Insurance & Risk Management
- Replanting Considerations
- Managing a Recovering Crop
- Cover Crops

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Resource Package

Hail Know Resource Package

- This is a three-part project
- Each part is designed for different learning styles

Infographics

Videos

Website

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Resource Package: Infographics

Infographic: a visual image to represent information or data that appeals to visual and verbal learners

Appealing and ready to share

Easy to read and understand

One infographic for each topic

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Resource Package: Videos

Video: a recording of images that appeals to visual and auditory learners

Each video is 3-4 minutes in length

Contain expert interviews and relevant footage

One or more videos for each topic

Resource Package: Website

Website: a sister website to CropWatch that appeals to many learning styles

Connects content, infographics, and videos

Incorporates timeless information

One page for each topic

cropwatch.unl.edu/hailknow

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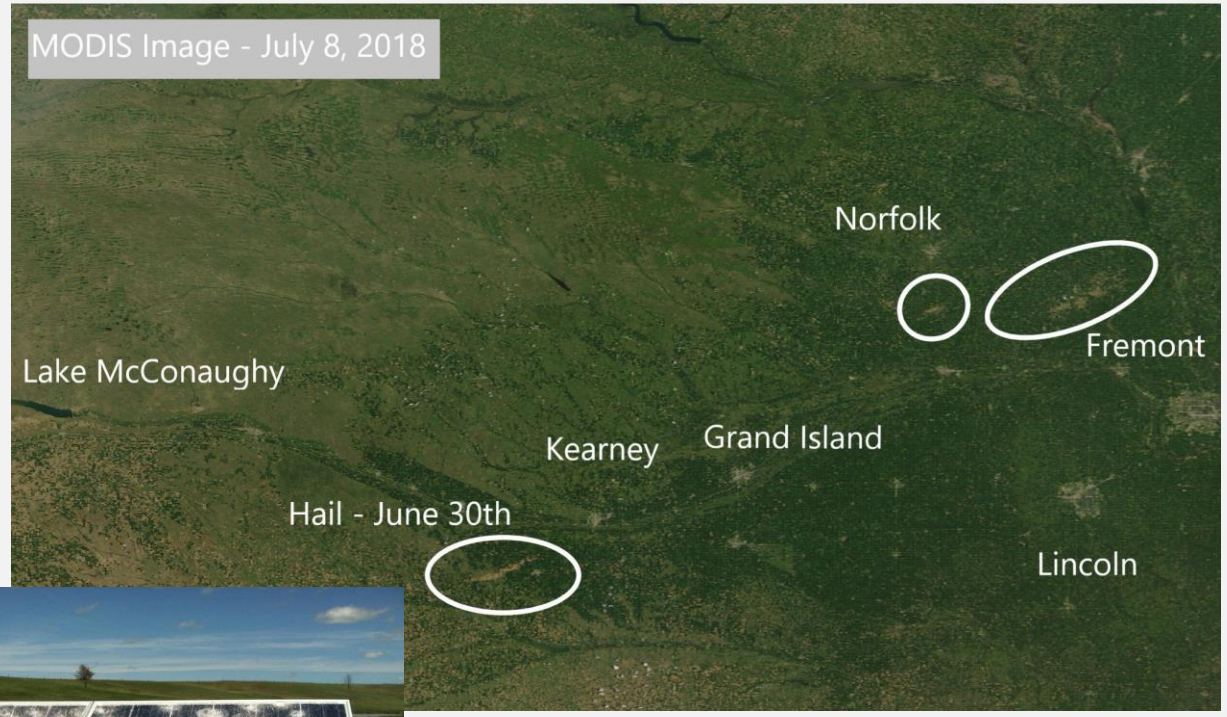
Resource Package: *In-Season Response

Meetings: Held three meetings in hard hit areas of Nebraska in 2018

Articles: Wrote articles on recovery options, forage considerations, weed management, etc.

Videos: Added four new late-season hail videos in August 2018



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Feedback

Gathering Feedback

We want our resource package to be useful and valuable

Your feedback will allow us to refine the package *and* develop new resources for you

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