Who’s Minding the Marsh?

John Eadie
Richard Kaminski
David Koons
Kevin Ringelman
Minding the Marsh

• Ecology & biology of the Marsh
• New challenges, new technology, integrative management
• A critical resource ...
  ➢ Human resources
• Who are the marsh minders and who will they be in the future?
Decline in Waterfowl Hunters

- Reduced revenue from stamps and licenses
- Loss of support for waterfowl policy
- Eroding waterfowling traditions
U.S. Rural and Urban Population

Rural

Urban


Rural

Urban
Changing times

**Total Ducks**

**Active Hunters**

**% Urban**
Changing times

• Recruitment and retention of hunters
• Engaging a broader constituency
• What to do, how to do it and where to do it?
• WHO will do it?
This Talk

• The future of waterfowl & wetlands conservation depends not only on $$$ and acres, but also PEOPLE with necessary skills and passion

• Are we losing that capacity?
The Future

1. Future Hunters (R3)
   - Recruitment, retention & reactivation

2. Future Managers and Biologists
   - Education & Training

3. Future Duck Club Owners & Partners
   - Investment
Eroding Education

“I like to play indoors better 'cause that's where all the electrical outlets are”
Eroding Education

Who’s minding the marsh?
UC Davis wildlife majors in waterfowl management
% activity ("some" or "lots")

- Bird watching: 97%
- Hiking/Camping/Outdoors: 78%
- Photography: 74%
- Fishing: 69%
- Hunting: 34%
An endangered species – waterfowl faculty at 76 University Natural Resource programs

Kaminski 2002, 2013

65% of schools
53% would replace

Kaminski 2002, 2013
THE FUTURE OF WATERFOWL MANAGEMENT WORKSHOP 2
National Conservation Training Center,
Shepherdstown, West Virginia
27-28 September 2017
Waterfowl & Wetland Ecology, and Field Experience

Importance
(N=63)

% of responses

Skill

% of responses

Less  
Same  
More

Low  
Med  
High

(WATERFOWL ECOLOGY AND MANAGEMENT
Second Edition)

Guy A. Baldassarre
Eric G. Bolen

Less  
Same  
More

Low  
Med  
High

(Integeral of responses)
Role of Hunting

Importance

- Low: 0%
- Med: 20%
- High: 60%

Skill

- Less: 80%
- Same: 20%
- More: 0%
Social Media

Importance

% of responses

Skill

% of responses

Introducing the all-new DU App for iPhone & Android.

All DU apps rolled into one:
- Migratory Map
- Waterfowler’s Journal
- Rainbird (i)
- Off-Season
- Hunting Tools
- MyDU
- Much more!

The DUCK HUNTER'S
Refuge – EST 1999 –

DUCKhunting chat.com
Our future professionals

• Need for strong skills in waterfowl & wetland ecology, field techniques, role of hunting
• Our graduates are less-well trained in these areas
Why has the training faltered?

- Millennials with different experiential backgrounds
- Reduced support for field-based education
- Loss of waterfowl & wetland faculty and programs
- Focus on theory, not application
  (book smart, street dumb)

We need more mud on the walls of the ivory towers
So what can we do?
Protect the base (drought-proof)  
Endowed Chairs & Programs

Dennis G. Raveling  
Endowed Waterfowl Chair  
UC Davis

James C. Kennedy & David R. Grohne  
Chair, Waterfowl & Wetlands Conservation, University of Wisconsin-Stevens Point

James C. Kennedy  
Chair in Waterfowl & Wetlands Conservation  
Mississippi State University

C. Berdon and Rolanette Lawrence  
Chair in Waterfowl Research  
Texas A&M-Kingsville

Bricker Chair in Wildlife Management  
Texas Tech University
Protect the base - Endowed Chairs

Only 7 endowments of 32 current programs in North America
Re-tool university & community college teaching and training programs

- Need tractor drivers and program developers
- Managers and modelers
- Develop associate degrees
  B.S. (or Ph.D.) not for everyone
- Extension specialists to outreach science to landowners and public managers
- Hands-on boot camps / field training
- Engage private sector
Experiential training
Student Hunter Camp
California Waterfowl Association, Paul and Sandi Bonderson
Student Hunter Camp
California Waterfowl Association, Paul and Sandi Bonderson
Honestly, I cried when I shot my first duck – she didn’t die immediately, but Jeff was kind enough to finish her off. She was still warm in my hands as I carried her back to the blind. I was blinking back tears as I was being congratulated on my first duck.

But I didn’t exactly know how I felt – I had killed for the first time, and it made me a little sad. However, after a minute, I reminded myself that humans have been hunters for as long as we have been on this earth. I realized that I was for the first time, directly responsible for the meat I would later eat.

At the end of the hunt, I had six ducks: four mallards, and two pintails!
People say that you cannot put a price on nature, and until this weekend I would have agreed. But after this weekend’s experience, I have realized that putting a price on nature is the only way to save it. Hunters love and appreciate nature in an incredibly tangible way. I had no idea how much single payer conservation efforts could accomplish.

It might sound counterintuitive, but while hunting at Bird Haven ranch I felt more optimistic about our world’s future than I have in a long time.
Mud on the boots
blood on the hands
skin in the game

• We won’t sustain what we don’t care for
• We won’t care unless we obtain value from it
• We can’t value what we don’t know and don’t experience
The Future

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Cost of Management

Average Annual Cost of Management

$10,000 - $20,000 per year
Importance of hunting

Importance of Management for Harvesting for Waterfowl

- NOT VERY
- SOME
- VERY

Region
- SAN
- SUISUN
- SAC
Importance of habitat (food)
Investment and harvest success

Average # of birds taken (in a season) vs. Average Annual Cost of Management

- Average # of birds taken (in a season)
- Smooth
The Future

- Decline in waterfowl hunters and revenues
- An aging population of hunters and club owners
- Increasingly urban society, less supportive
What to do?

- Provide access & opportunity
- Teach teachers
- Partnerships with non-traditional partners
- Recruit locavores
- Succession planning

➢ Who are the future members of your club and why do they want to be (and can afford to be)?
Who’s Minding the Marsh?

We are.
Average # of birds taken (in a season) vs. # of Acres

Average # of birds taken (in a season)

Smooth

# of Acres

0-250  251-500  501-750  751-1000  1001

0-300  301-750  751-1000  1001

1001  751-1000  501-750  251-500  0-250