

Who's Minding the Marsh?

John Eadie
Richard Kaminski
David Koons
Kevin Ringelman

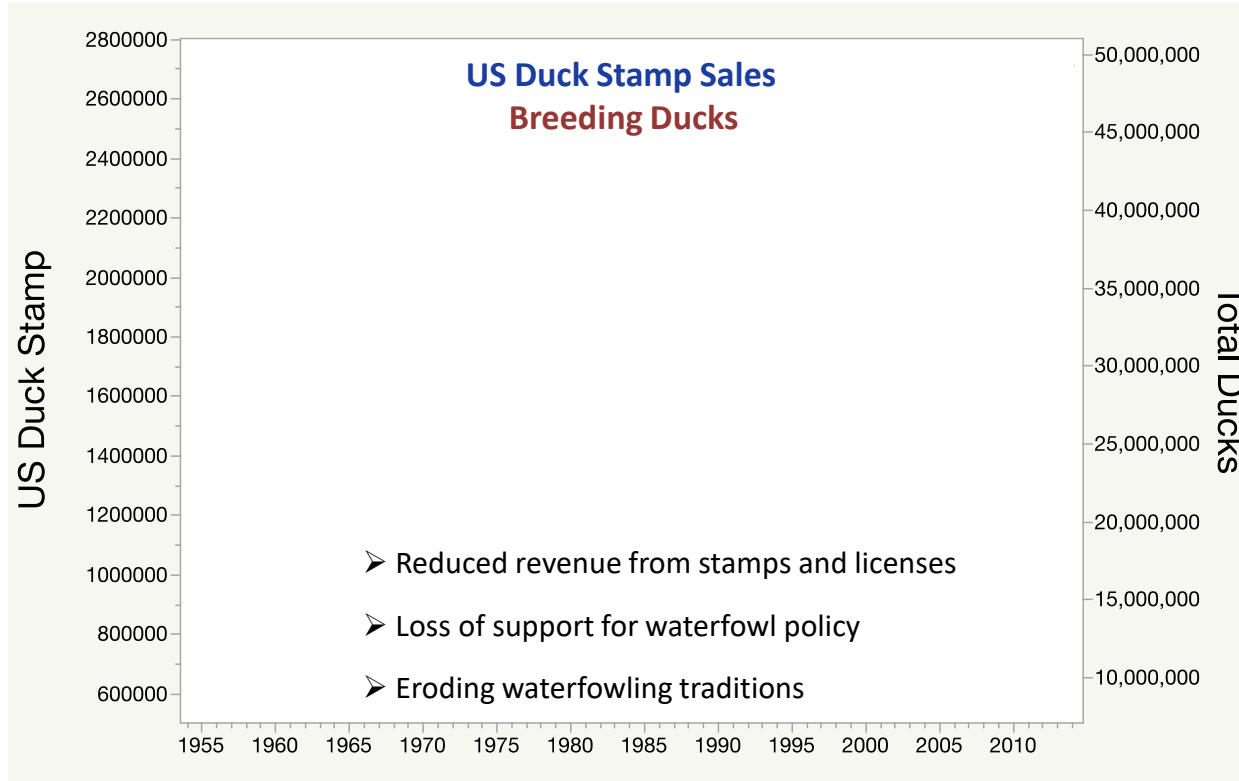


Minding the Marsh

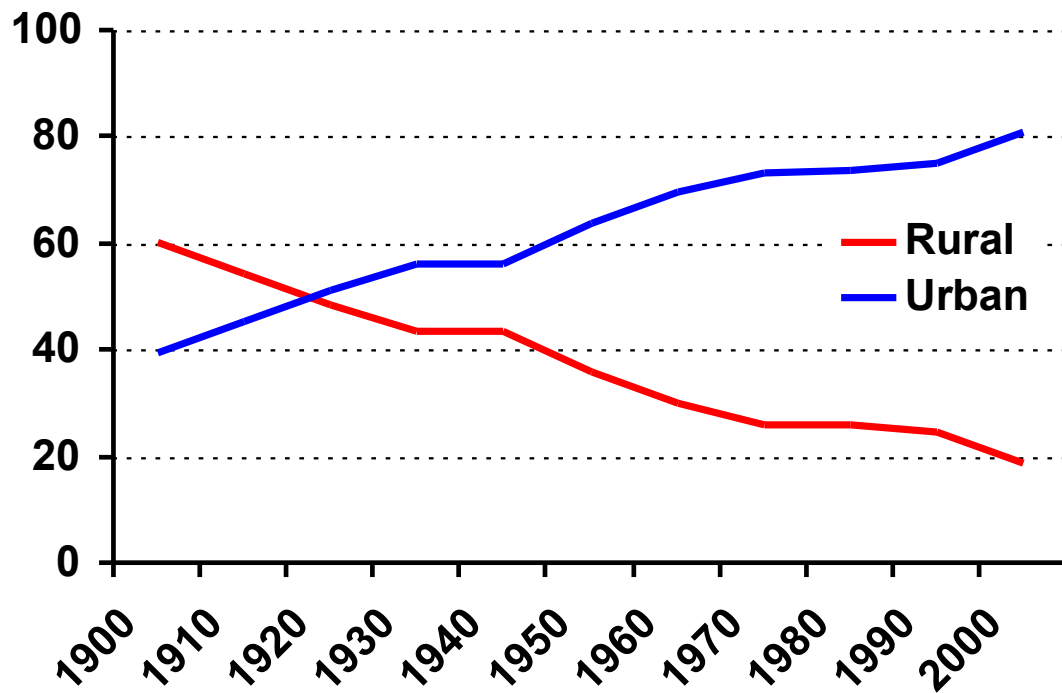
- Ecology & biology of the Marsh
- New challenges, new technology, integrative management
- A critical resource ...
 - Human resources
- Who are the marsh minders and who will they be in the future?



Decline in Waterfowl Hunters

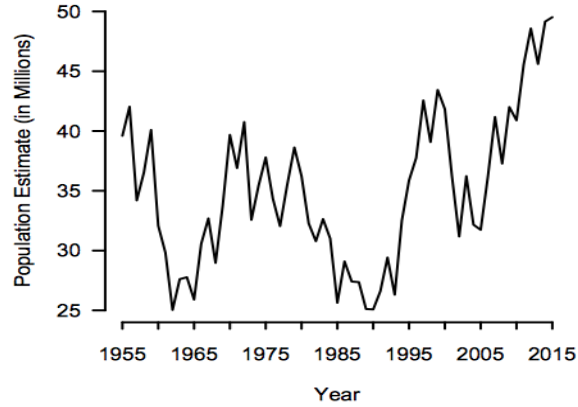


U.S. Rural and Urban Population

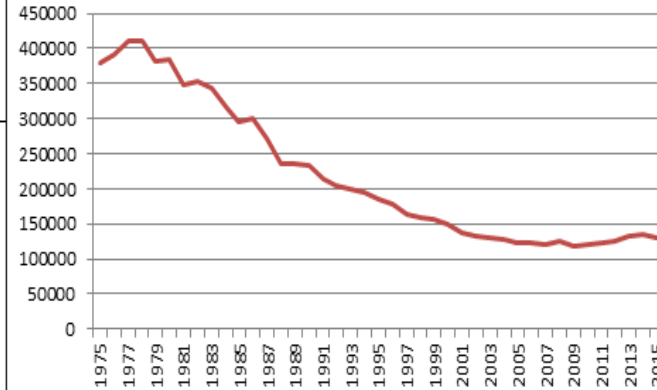


Changing times

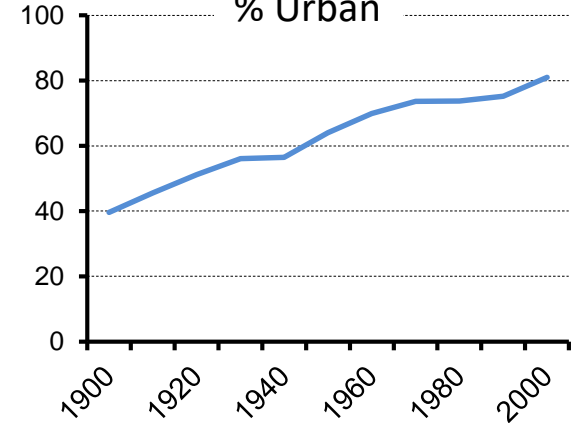
Total Ducks



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

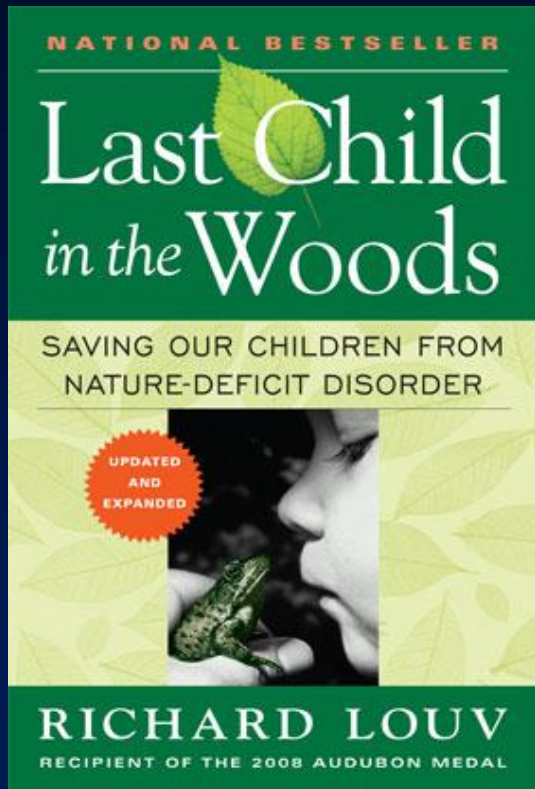
- Education & Training

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

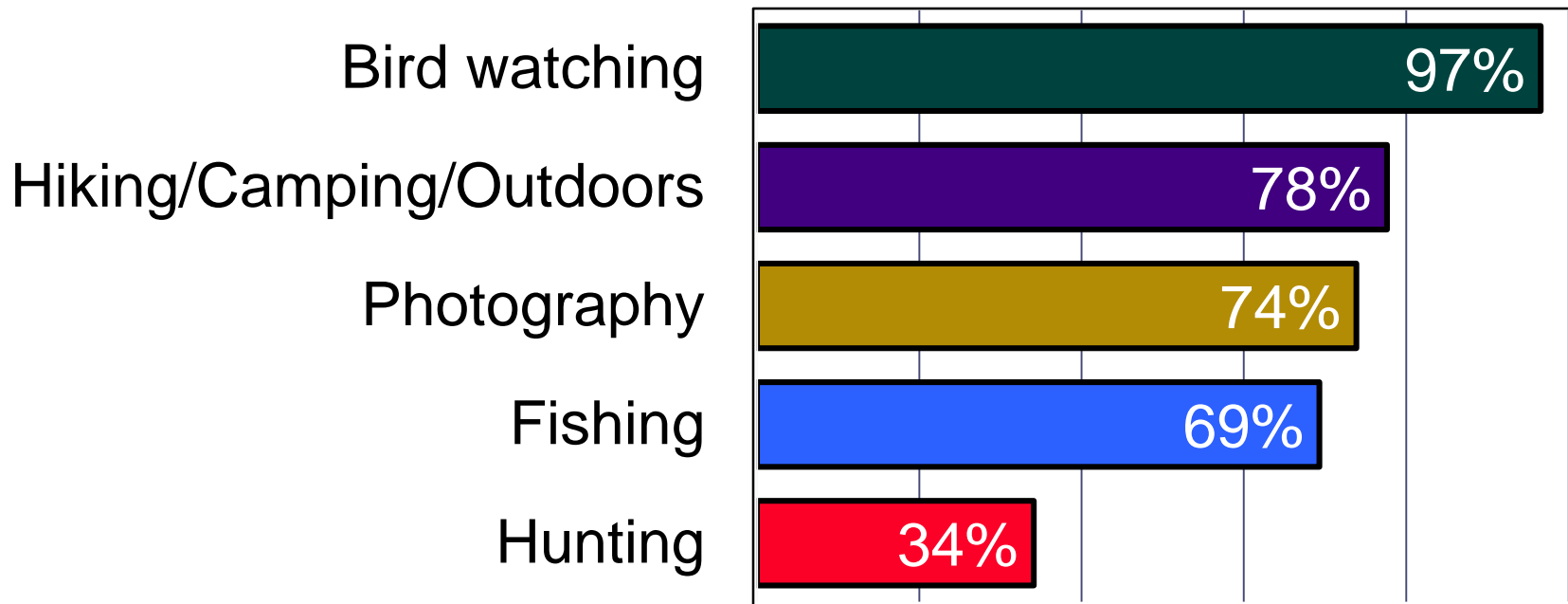


Who's minding the marsh?

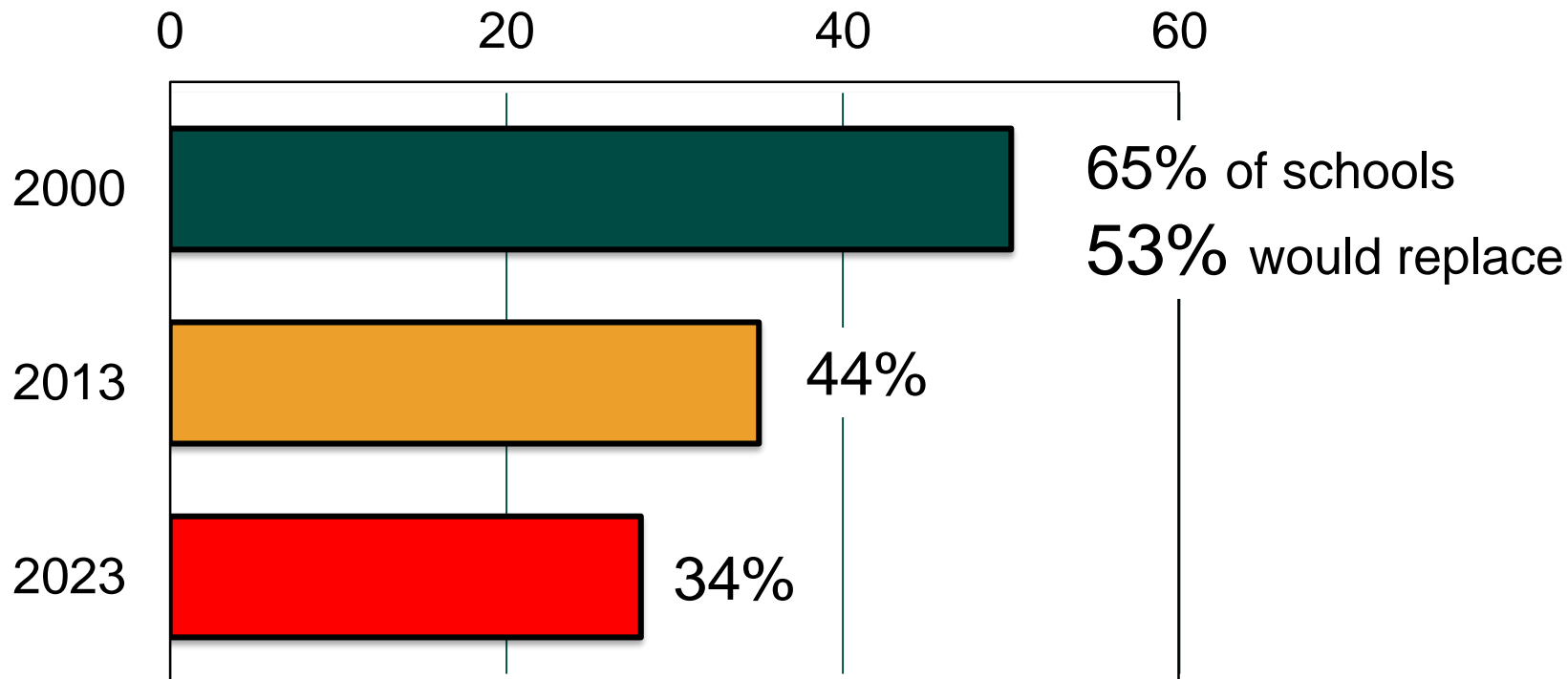
UC Davis wildlife majors in waterfowl management

% activity (“some” or “lots”)

0% 20% 40% 60% 80% 100%



An endangered species – waterfowl faculty at 76 University Natural Resource programs





NAWMP2018

North American Waterfowl Management Plan

THE FUTURE OF WATERFOWL MANAGEMENT WORKSHOP 2

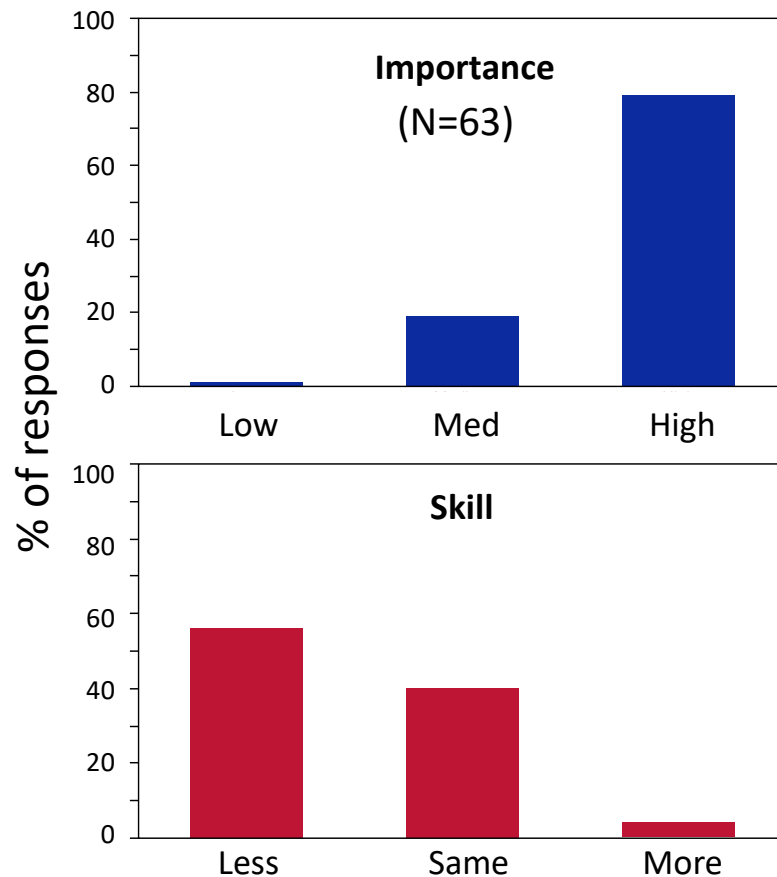
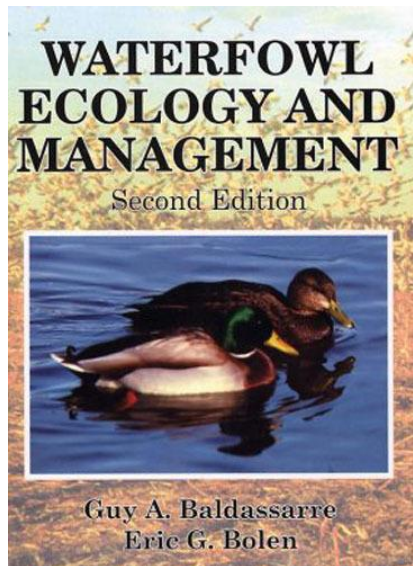
National Conservation Training Center,
Shepherdstown, West Virginia

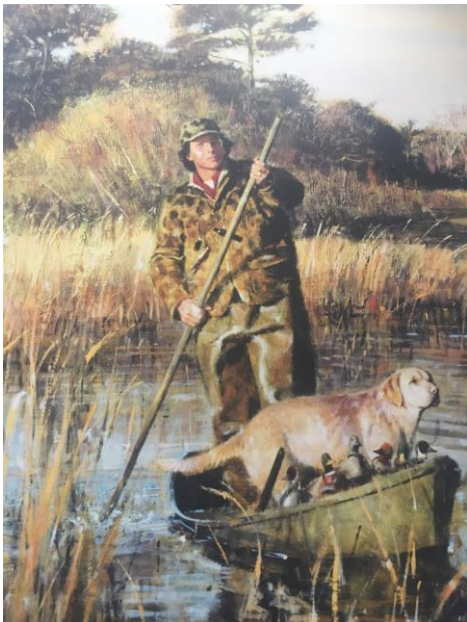
27-28 September 2017



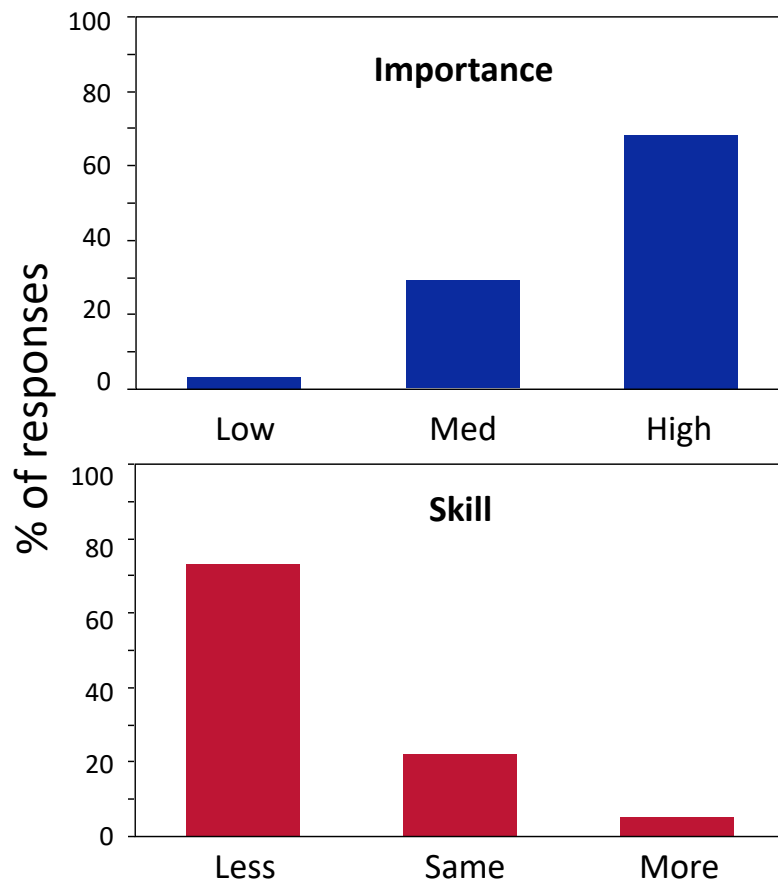
<https://nawmp.org>

Waterfowl & Wetland Ecology, and Field Experience

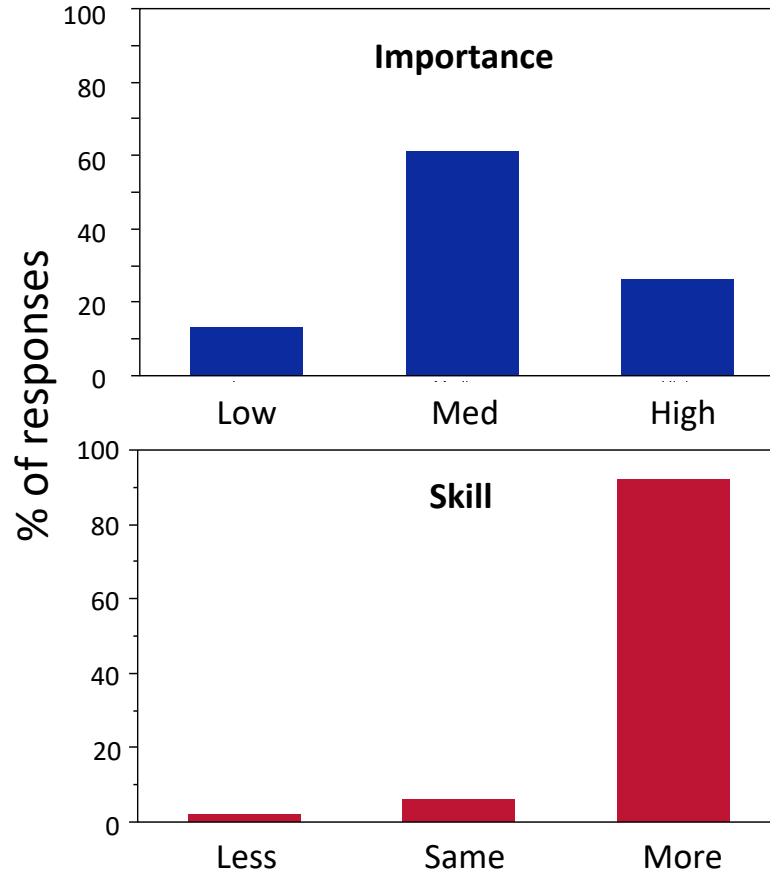
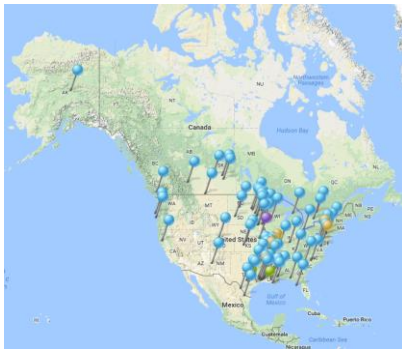
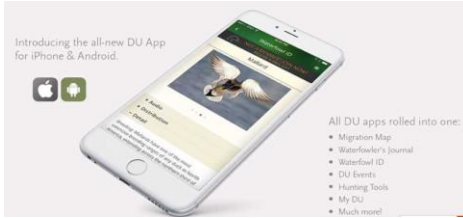




Role of Hunting



Social Media





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
UNIVERSITY OF CALIFORNIA



Colorado State
University
WARNER COLLEGE OF
NATURAL RESOURCES



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



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

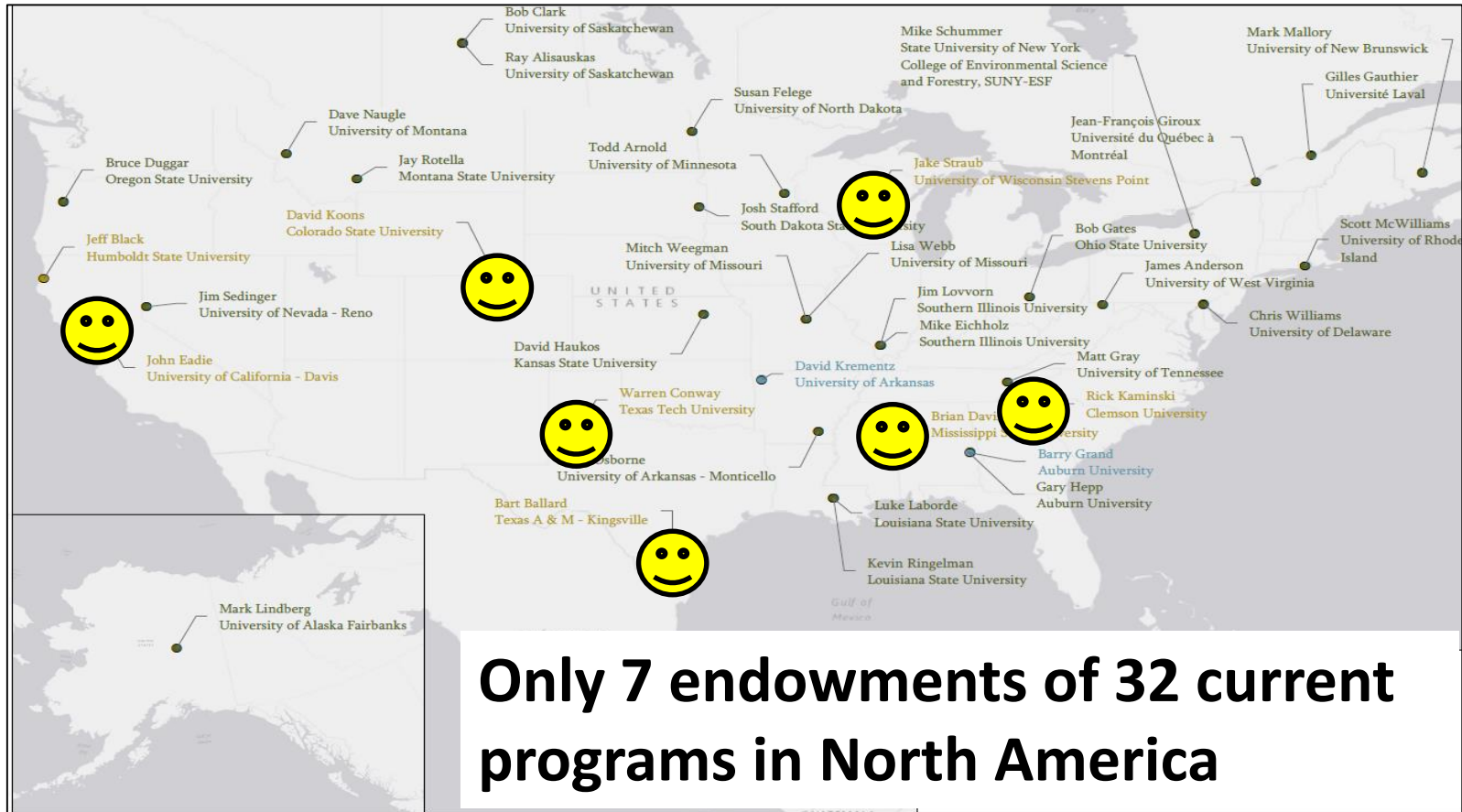


C. Berdon and Rolanette Lawrence
Chair in Waterfowl Research
Texas A&M-Kingsville



Bricker Chair in
Wildlife Management
Texas Tech University

Protect the base - Endowed Chairs



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



Student Hunter Camp



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!



Student Hunter Camp



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

1. Future Hunters (R3)

- Recruitment, retention & reactivation

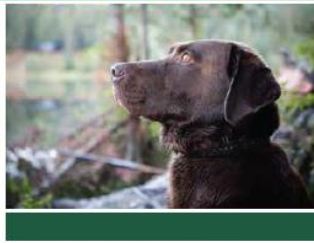
2. Future Managers and Biologists

- Education & Training

3. Future Duck Club Owners & Partners

- Investment

2012 Wetland Management Survey



WILDLIFE, FISH, & CONSERVATION BIOLOGY

1088 Academic Surge
University of California, Davis
One Shields Avenue Davis, CA 95616-5270



SUISUN MARSH MANAGEMENT SURVEY

WILDLIFE, FISH, & CONSERVATION BIOLOGY

1088 ACADEMIC SURGE
UNIVERSITY OF CALIFORNIA, DAVIS
ONE SHIELDS AVENUE DAVIS, CA 95616-5270

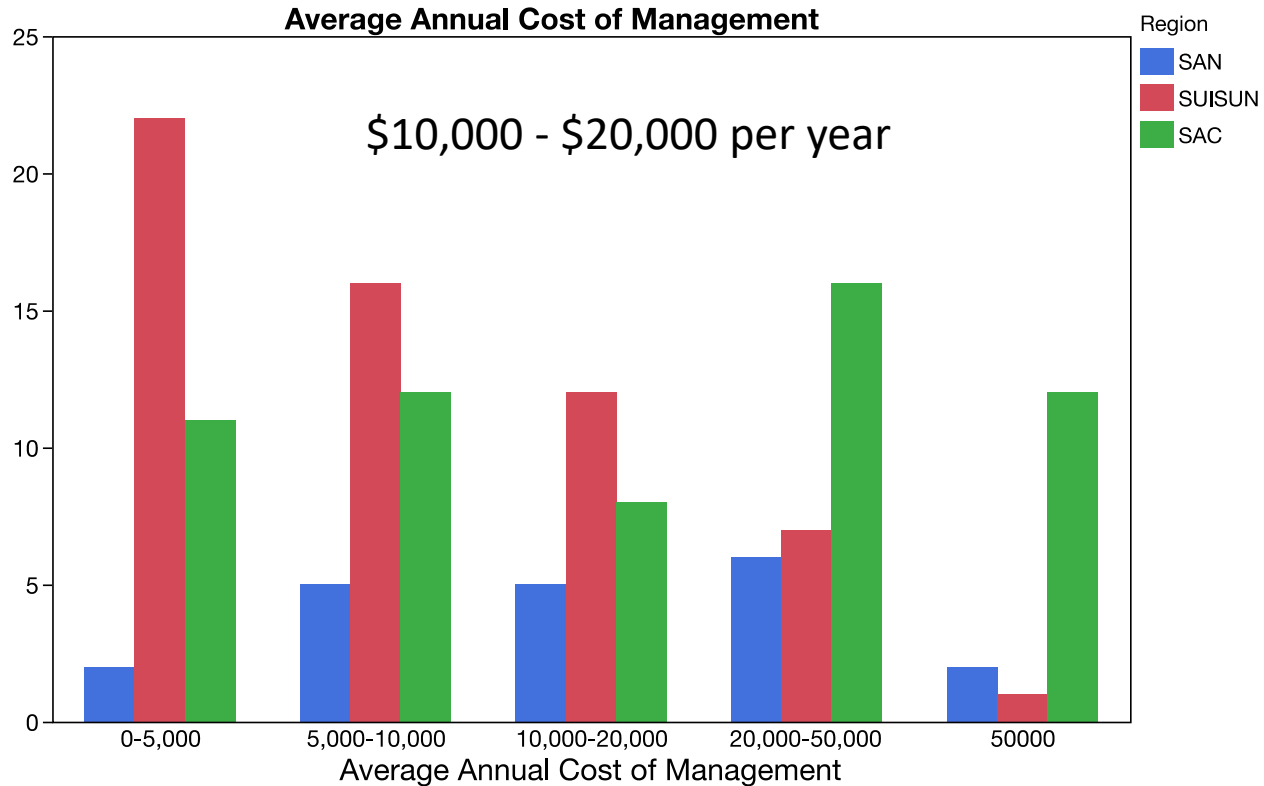
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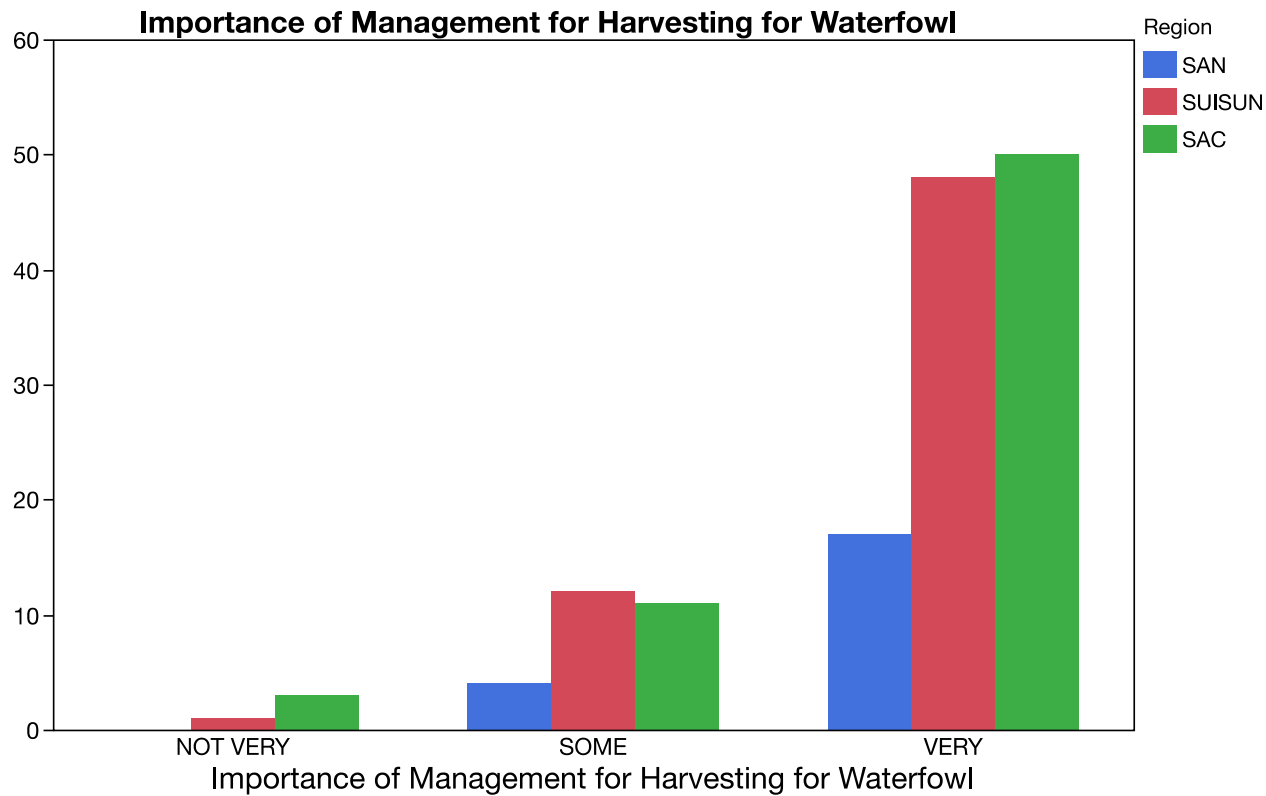
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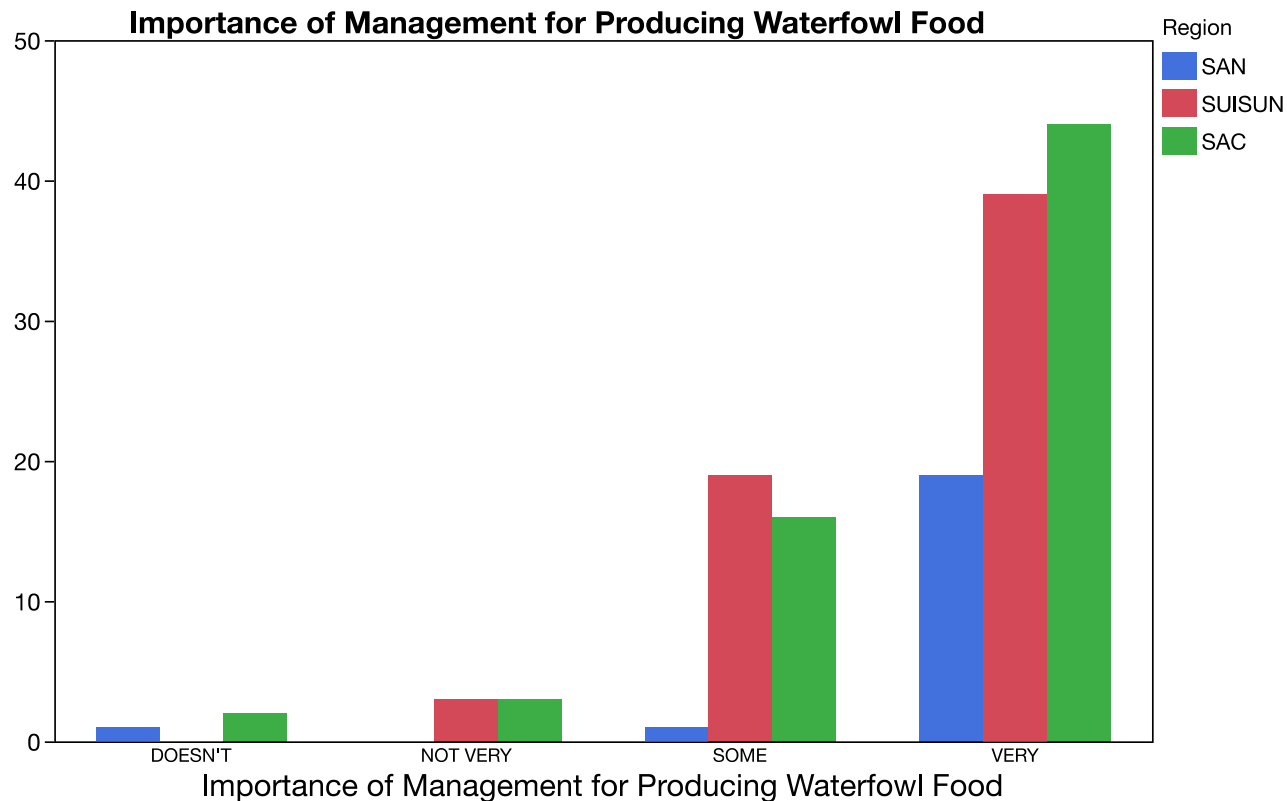
Cost of Management



Importance of hunting

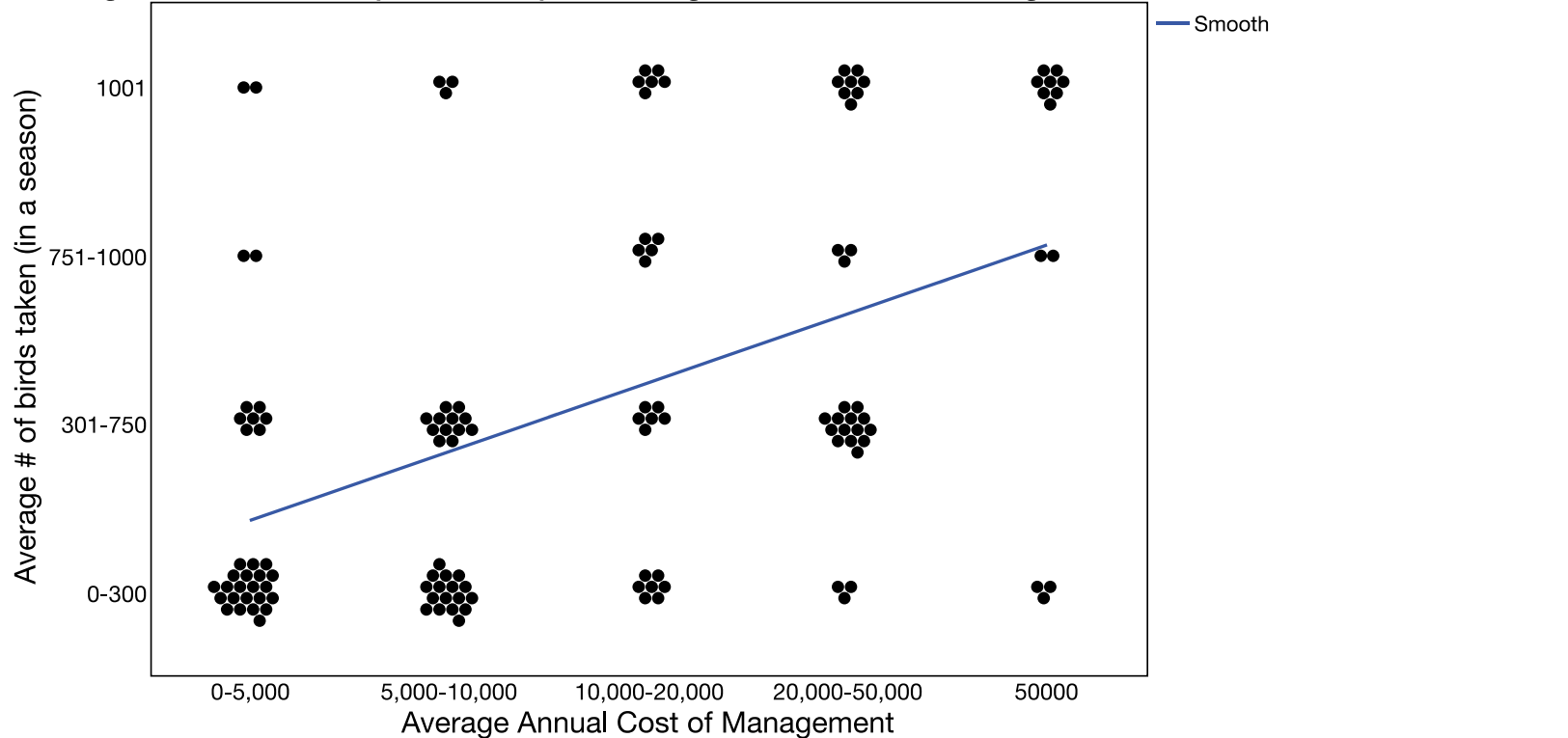


Importance of habitat (food)



Investment and harvest success

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



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)?



A silhouette of a swan in flight, wings spread wide, against a sunset sky. The sky transitions from a deep purple at the top to a bright orange near the horizon. The water below is dark and reflects the colors of the sky. The text "Who's Minding the Marsh?" is written in a bold, orange, sans-serif font at the top of the image.

Who's Minding the Marsh?

We are.

