

Five Ongoing Challenges for the USWBSI

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U.S. Wheat & Barley
Scab Initiative

What this talk is about

Observations about
the USWBSI and the
people who live
within
its borders



But First, How are we doing?



Accomplishments

- Creation of Coordinated Projects
- Development of Database for USWBSI Breeders
- FHB Alert System
- Update USWBSI's Mission Statement
- Converting to electronic submission and review of pre-proposals
- 2014 Farm bill – working with NBIC and NWIC, language authorizing \$10M for scab research

Accomplishments

- NASS survey
- USWBSI's Impact Statement
- Economic Study

Another Feel-Good note....

- March 2016 - Fiona Doohan hosted my seminar at University College, Dublin. The response: “wow, the USWBSI has achieved all of that for so little money!”
- In the same vein, – Glenn Weaver of Ardent milling has stated publicly and repeatedly, that our funding level should be increased by at least one order of magnitude, if not two
- Bottom Line: the Initiative PI’s have accomplished a tremendous amount with limited resources

So why do I feel uneasy???

- Economic study: \$71 for every \$1 invested!
- OK what's next?
- How do we maintain the delicate balance between demonstrating we are still needed – i.e. that scab is still a problem – and showing that we have made progress?

Five Difficult Pieces

- 1) Serving the Stakeholder
- 2) Giving the USWBSI a Creative Lift
- 3) Leaving our Comfort Zone
- 4) Managing The Narrative
- 5) Building a Stronger Community

Everything Must Serve the Stakeholder

- We are scientists and we want to be engaged with gnarly problems – that is what animates us
- Doyle Lentz - the conference call
- It's not sexy research, but it's money in the bank

Creative Lift Must Come from the PIs – Not from the EC

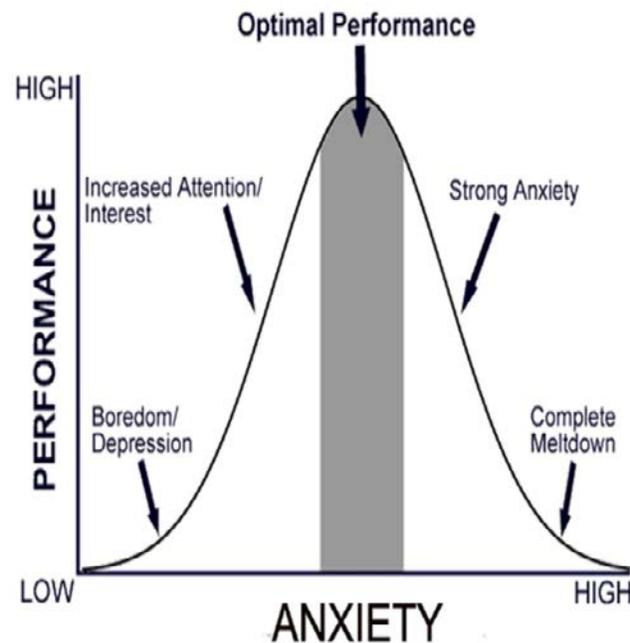
- The EC is all about Process and Accountability
- The New Ideas have to come from the PIs –
Brian Steffenson – the phone call
- This energy could and should include ideas about the Forum – breakout sessions, building in time for colleagues to brainstorm, etc.
 - Example: Flash and Dash

Leaving our Comfort Zone

- Staying in our comfort zone is very natural but it limits our creative impulses and limits what the USWBSI can achieve.

Leaving our Comfort Zone

- Yerkes and Dodson, 1908: to maximize performance, we need a state of relative anxiety—a space where our stress levels are slightly higher than normal. This Optimal Anxiety space is just outside our comfort zone.



Examples

- C. Cowger taking on NASS
- R. Dill-Macky taking on APHIS
- J. P. Murphy – Doubled haploids

Managing the Narrative



Robert Reich's American Narratives

	Hope	Fear
Individual	<p>THE TRIUMPHANT INDIVIDUAL – ...the little guy who works hard,takes risks, believes in himself, and eventually gains wealth, fame, and honor</p>	<p>THE ROT AT THE TOP - the malevolence of powerful elites</p>
Community	<p>THE BENEVOLENT COMMUNITY – neighbors and friends who roll up their sleeves and pitch in for the common good</p>	<p>THE MOB AT THE GATES – the US is a beacon of virtue in a world of darkness, blessed But endangered by foreign menaces</p>

USWBSI NARRATIVES

	Hope	Fear
Individual	<p>THE TRIUMPHANT INDIVIDUAL – ... the hardworking PI who is productive and makes a contribution</p>	<p>THE ROT AT THE TOP – comfortable PIs who want to maintain the status quo</p>
Community	<p>THE BENEVOLENT COMMUNITY – colleagues in the USWBSI i.e., fellow PIs, stakeholders – who support and collaborate with the hardworking PI</p>	<p>THE MOB AT THE GATES – Wannabe USWBSI Members – i.e., salivating PIs on the outside looking in</p>

This is NOT who we are, and that is NOT how it is!

But.....

- The USWBSI is configured in a way where this could happen
- **Perception is everything**
- No big fish, no little fish, just strong swimmers who can solve this problem

Building a Stronger Community

- The USWBSI has allowed us to build and develop a strong sense of community
- For breeders and pathologists, this has meant that market class and geographical boundaries melt away
- But most of the strong community ties do not cross disciplinary boundaries
- We teach our students that the big problems we face will only be solved by trans-disciplinary approaches
 - E.g. - high throughput phenotyping involves engineers

Building a Stronger Community

- There are 2 plant pathologists and a grain crops specialist 3 hours away but I have yet to propose we get together and figure out how to make the whole > sum of parts

The Endgame

- Solve the problem of scab, fold up our tent and go home....
- But we know it's not that simple
 - 2014: serious scab in the south
 - 2015: serious scab in the corn belt and south
 - 2016: serious scab in northern tier of ND, MN and in the south



Why Should Scab Stay on Our Radar?

“Once you have a head scab epidemic, you will see scab every year” – J. P. Murphy

