WETLAND SCIENCE AND PRACTICE

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Lena Delta - Photo by: S. Zubrzycki

WETLAND SCIENCE
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Aim and Scope of Wetland Science and Practice

The *WSP* is the formal voice of the Society of Wetland Scientists. It is a quarterly publication focusing on news of the *SWS*, at international, national and chapter levels, as well as important and relevant announcements for members. In addition, manuscripts are published on topics that are descriptive in nature, that focus on particular case studies, or analyze policies. All manuscripts should follow guidelines for authors as listed for Wetlands as closely as possible. All papers published in *WSP* will be reviewed by the editor for suitability. Letters to the editor are also encouraged but must be relevant to broad wetland-related topics. All material should be sent electronically to the current editor of *WSP*. Complaints about *SWS* policy or personnel should be sent directly to the elected officers of *SWS* and will not be considered for publication in *WSP*.

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2011-2012 CHAPTER PRESIDENTS

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WSP

President's Message

2011 SWS Mid-Year Meeting: November 19, 2011

Since the meeting in Prague I have been primarily focused on two items. First was ensuring a seamless transition of the Society's business operations from Burk to Association Management Partners (AMP). As is the case with any move there are a lot of details that must be addressed and the Executive Board and AMP worked to make this transition as smooth as possible. AMP officially took over as the Society's business operations on November 1, 2011 and they continue to work tirelessly to create an infrastructure that we are confident will serve all of the members better. The membership database which is effectively the operational backbone of the Society will be launched in time for the membership drive.

Second, the search for a new Editor-in-Chief of Wetlands was a long process and I am happy to report that a new Editor-in-Chief has been selected. Nine candidates were considered by the search committee (chaired by LePage) that was created by Glenn Guntenspergen and four candidates were short-listed. I created a committee that was chaired by Chris Craft and this committee was charged with reviewing the short-listed candidate applications, interviewing the candidates, and providing their recommendation for the position of Wetlands Editor-in-Chief to the Executive Board. I would like to thank the members of both committees for the time and effort dedicated to this very important process. The Executive Board reviewed the recommendation and a motion to appoint Marinus Otte as the new Editor-in-Chief of Wetlands is provided in this meeting packet.

Membership continues to be on the minds of the Executive Board as these fees determine the operating budget for Society and all of its programs. The membership numbers for 2011 look are improved and as of October 10, 2011 there are 2755 members, which surpass the number of members in 2010. A breakdown of the membership by Chapter is provided in Figure 1.

Despite the slight increase in membership, I strongly urge our current members to make a conscious effort to recruit new members, and in particular students. Our students are the future of the Society and I believe that the benefits afforded to the students far outweigh the minimal cost of membership.

Bringing additional value to all of the members has been one of my foci over the last several months. One of the initiatives that Andy Cole has been working to implement is a new format for Wetland Science and Practice (WSP). In 2012 WSP will start publishing peer-reviewed articles that present the important work that the members from the applied side of the wetland sciences perform. Andy has done a remarkable job assembling an international cohort of Associate Editors and developing editorial policy. I would like to thank Andy and the Associate Editors for the time and effort that they are putting into making the new WSP a huge success and I urge our members from the applied and government sectors to contribute

Chapter	Student Members	All Member Types	% of Students
Australasia	6	44	14
Alaska	1	38	3
Asia	1	40	3
Canada	13	80	16
Central	4	41	10
Europe	17	82	21
International	1	30	3
Mid-Atlantic	39	383	10
North Central	72	361	20
New England	12	223	5
Pacific Northwest	11	292	4
Rocky Mountain	17	123	14
South Atlantic	53	515	10
South Central	60	315	19
South America	3	28	11
Western	17	160	11
Total	**327**	**2755**	**12**

Figure 1: Membership Counts by Chapter

articles. The success of this new initiative depends on your contributions and sharing the innovative approaches that you have developed and implemented in the workplace.

In October I was invited to Taiwan as a guest of Taiwan's Construction and Planning Agency (CPA), Ministry of the Interior to participate in the 2011 International Workshop on Wetland Conservation. I represented the SWS, gave a series of lectures and a keynote address, and met with wetland enthusiasts, scientists, and policy makers over the week-long visit. I would like to extend my gratitude to my hosts, the CPA and Wei-Ta Fang (Country Designate of Taiwan, SWS Asia Chapter) for their warm welcome, generosity, and a superb experience in Taiwan.

The 9th INTECOL International Wetlands Conference will be held jointly with the Society of Wetland Scientists (SWS) and Greater Everglades Ecosystem Restoration (GEER) in Orlando, Florida June 3-8, 2012. Glenn has been working on meeting logistics with the two other co-chairs and I have been busy soliciting sponsorship support for the meeting.

The Society's committees are an important service that we provide to the members. Over the last several months I have been contacting committee chairs and appointing new members to these committees. I appointed Beth Middleton to chair the

PRESIDENT'S MESSAGE

Publications Committee and Greg Noe to chair the Awards Committee. I would like to thank all of the committee chairs and their members for their continued support and service to the SWS.

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December, 2011
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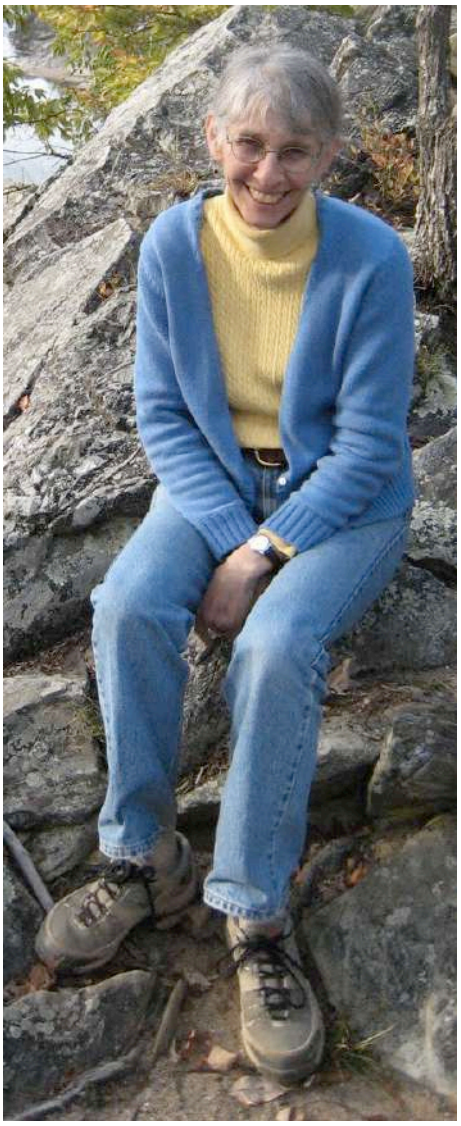
Obituary: Joan G. Ehrenfeld 1948-2011



A commemoration by her family

Dr. Joan Ehrenfeld, an expert on invasive species, wetlands ecology, and urban ecology, died at her home in Highland Park, New Jersey on June 25, 2011, after a year-long battle with acute leukemia. She spent her 35-year career as a Rutgers University professor of ecology studying plant communities in both New Jersey's wildest and most settled places, from the Pine Barrens to the urban wetlands of Rahway. She was recognized around the world as a leading voice on plant ecology.

Born in New York City, Dr. Ehrenfeld began her career early when she was chosen for a National Science Foundation-sponsored program for high school students and spent a summer working in a Barnard College research laboratory. She earned a bachelor's degree, magna cum laude, in Biology from Barnard in 1969, and then earned a Master's degree from Harvard in 1970 and a Ph.D. from the City University of New York in 1975.

Dr. Ehrenfeld balanced her dynamic scientific career with the raising of four children. She began her career at Rutgers in 1976, as an Assistant Research Professor in the Center for Coastal and Environmental Studies. She directed the New Jersey Water Resources Research Institute of the US Geological Survey from 1990 to 2009, first in the Institute for Marine and Coastal Sciences, and then, starting in 1997, as a full professor in the Department of Ecology, Evolution, and Natural Resources.

Her career was marked by boundless curiosity and a wide range of professional interests. Among other things, she conducted studies on urban wetlands, restoration ecology, invasive plants in numerous habitats, and the effects of heavy metals in wetland soils; some of her recent work examined the role of biodiversity in the spread of West Nile Virus.

Wearing her trademark hat - a tan baseball cap with the words "Plays in the Dirt"

embroidered above the brim - she taught legions of students the art of field science. Whether she was camping overnight with students at a Rutgers Field Station, or helping them analyze their data in the lab, she was a role model for undergraduates, grad students and post-doctoral fellows, proving through her example that it is possible for a woman to raise a family and also be a leader in the sciences. Despite the demands and rigors of a career in science, Dr. Ehrenfeld always put her family first. She was inexhaustible—returning from long days in the field or lab to cook dinners from scratch, help with homework, and juggle the needs of four children. She devoted weekends to family activities and instilled a great love in her children for the things she loved most too: wilderness, music, theater, and opera. She delighted in being a grandmother, sharing the same books, songs and games with her three grandchildren that she had filled her children's lives with years before.

Dr. Ehrenfeld was never happier than when she was outdoors, preferably deep in the mud and green silence of a cedar swamp. She organized weekend hiking trips with her husband, David Ehrenfeld, also a Rutgers biology professor, and any children or friends who could be brought along. She invited her students on hikes and canoe trips, setting a pace that was challenging for people twenty years her junior. In one recent study, she used citizen science as a method of investigating the responses of native vegetation to invasive species, training groups of hikers to monitor species along New York and New Jersey trails.

A generous colleague, Dr. Ehrenfeld collaborated widely with others on her research, and was recognized by her peers for her distinction as a scientist, teacher, and leader. She received numerous awards, including the 2011 Research Excellence Award from the School of Environmental and Biological Sciences at Rutgers, the Cook College 2003 Research Excellence and Impact Award, and the 1999 Cook College Academic Professional Excellence Award for Academic Innovation and Creativity. In 2000, she was elected a Fellow of the American Association for the Advancement of Science, and in 2010 she was elected a Fellow of the Society of Wetland Scientists.

An assiduous grant-writer, Dr. Ehrenfeld brought in millions of dollars over her career to support ecological research. In the years between 2005 and 2010 alone, she raised $2.1 million in grant funding from the EPA, NSF, USDA, NJDEP, and other public and private sources.

She served the scientific community in many ways; she was a member of National Science Foundation panels, served as a member of the National Research Council Committee on Independent Scientific Review of Everglades Restoration Progress, reviewed articles for many journals and was selected as a member of the Science Advisory Board of the United States Environmental Protection Agency. Her graduate students and post-doctoral students went on to occupy research and government positions around the world.

In demand as a speaker on many ecological topics, she has delivered invited lectures across the United States and around the world, in such locations as Bangalore, India; Lunteren, the Netherlands; Cuiaba, Brazil; and Beijing and Xiamen, China.
Her passion for science was matched only by the organization and determination that she brought to her work.

The author or co-author of over 120 scientific papers, she continued working on data analysis, advising students, and collaborating with others throughout her battle with leukemia. Her hospital room always filled with classical music, she worked through all the miseries of chemotherapy and a bone-marrow transplant. Since her diagnosis in April 2010, she was the author or co-author of more than a dozen scientific publications, including five book chapters.

Dr. Ehrenfeld was a lover of music, singing in the Highland Park Choir and playing piano, and a leader in her Jewish community. She is survived by her brother, Robert Gardner; husband, David Ehrenfeld; her children, Kate Gardoqui and her husband Daniel Gardoqui, Jane Dimyan-Ehrenfeld and her husband Michael Dimyan, Jonathan Ehrenfeld and his wife Emily Ford, and Samuel Ehrenfeld; and three grandchildren, and mourned by countless friends, relatives and colleagues. Donations in her memory may be made to the New York-New Jersey Trail Conference.

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Reasons for precaution in ecologically engineering peatland-based carbon sequestration

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There exists an increasing scientific consensus that rising atmospheric CO^2 levels, caused largely by fossil fuel emissions from energy supplies and land use changes, are of pressing concern as causal agents of climate change, ocean acidification, and ecological perturbation (IPCC 2007). There has also, regrettably, been a failure of the political establishment to create an effective and sustainable energy policy to greatly reduce these emissions. This failure, in combination with expanding technological innovation, has encouraged many researchers, politicians, and economists to consider geologically- and ecologically-based carbon sequestration methods, which may, at the least, provide a short-term boost to carbon emission reduction plans (Lal 2008). These schemes would capture and store either CO^2 from the atmosphere itself or from the point of emission. These plans tend to have promise at the small-scale, but none yet has been demonstrated as feasible for the scale of intervention necessary to reduce atmospheric CO^2 levels to those considered safe by the scientific establishment.

In this context, peatlands, which have naturally stored vast amounts of carbon for millennia, offer a hopeful model for ecologically-oriented sequestration methods (Dunn and Freeman 2011) as they have provided a number of other, related ecosystem services (Kimmel and Mander 2010). Peatlands have consistently maintained low or negligible rates of decomposition, and do so through a combination of acidic soil water conditions, plants whose phenolic exudates discourage microbial growth, and often, through relatively low atmosphere temperatures (Freeman et al. 2004). These systems, covering up to 3% of Earth's surface, therefore inspire a number of research ideas for how additional carbon can successfully be stored in response to the aforementioned problems. These proposals have included storing additional carbon within peatlands themselves, changing peatland water table conditions to encourage faster rates of sequestration, ecological modification to encourage phenol-producing plants to dominate peatland ecosystems, and genetically modifying peat species to more greatly amplify this phenol production.

This last scheme in particularly warrants additional discussion, and in response to a recent lecture (Freeman 2011) encouraging investigation into the phenolic system

with the explicit purpose of peatland-based ecological engineering, I wish to provide a few arguments to the research community in favor of different ecological strategies of carbon sequestration. This response is based on appeals to aesthetics and ethics, to potential ecological outcomes, and to economic utility, and is based on a mixture of reasoned scientific analysis and personal opinion. I also consider the practical importance of quick outcomes if carbon sequestration is to succeed in buying time for political action. After describing these concerns, I provide some suggestions for successful use of peatland-derived ideas regarding carbon sequestration in a managed, or even engineered, landscape context.

I find great ethical concern in applying ecological engineering methods to pristine landscapes, and in particular find applications of genetic modifications to these landscapes undesirable. These latter concerns are also relevant to the many anthropogenically-disturbed wetland or peatland sites which are undergoing restoration. Peatlands, and particularly pristine peatlands, represent a unique landscape class in their mixture of distinct hydrological functions, species diversity, and unusual contributions to the world's ecological services (including, for instance, their roles as libraries of atmospheric deposition, preservation of archeological materials, and functional role as regulators of water resources). Moreover, they are landscapes of exceptional beauty, harboring mixtures of colorful species in often spectacularly textured topographic settings. This topography includes hummock-hollow formations, raised bog mounds, and the patterning found in tundra polygons (Figure 1). These micro-niches provide zones for ecological growth and interaction, and should resonate with all those interested in maintaining natural systems, and indeed provide one source of worry for the effects of anthropogenically-induced climate changes. I appeal to this large-scale elegance to encourage great value to be given to the present status of peatlands, and to thereby promote precaution in risking modifications from this norm.

A more scientifically derived set of arguments is to consider the likely ecological outcome of attempts to encourage greater phenolic production in peat species, thus retarding decomposition and building up the stock of soil carbon. The complicating factor in this regard is due to the great energetic costs of generating phenols (usually for lignin or lignin-like cell wall components) at the biochemical level (van Breemen 1995). Sequestration research has suggested giving phenol-producers a boost, either through genetic modification or some kind of ecological farming pushing peatlands toward phenol production (Freeman 2011). Such plans could very easily have the effect of using up available phosphorus (Wetzel 1992) or allowing non-phenol producing plants to gain an additional competitive edge – though this is scarcely the sole

Figure 1: Polygonal Tundra Peatland in the Lena River Delta, Russia (Photo: K. Piel)

mechanism with which Sphagnum outcompetes other species in natural systems (van Breemen 1995). Restoration projects, though, often have difficulty (re-)establishing Sphagnum species (Rochefort 2000) due to pre-existing (degraded) water levels, species selection, nutrient conditions, and competition from birch trees. Knowledge on the ecology of peatland species interactions, especially within-Sphagnum interactions, is still evolving (Andersen et al. 2011), and so there is still considerable space for erroneous predictions of manipulation effects.

Next, there is a large scope of unknown variables that may interfere with peatland-based sequestration schemes. Peatlands are well-known to have complex interactions of hydrology, ecology, and biochemistry (Dise 2009). These systems are difficult to understand under normal circumstances, but adequate descriptions of potential changes resulting from changes in temperature, precipitation, and nutrient deposition have proven extraordinarily difficult to discern. For example, peatland responses to enhanced nitrogen and sulfate deposition over the mid-20th century are still being examined and debated, with considerable uncertainty regarding long-term ecological outcomes and adaptations to these changing driving circumstances (Bragazza et

al. 2006). The resilience of peatlands to these changes is still unknown, and I believe it will be nearly impossible to develop adequate tests in the short-term of their long-term ability to absorb substantial changes in carbon load (through carbon fertilization or storage) or biochemistry/ecology (through phenol-oriented interventions).

Finally, I present some thoughts regarding the economic utility of using peatlands as an amplified store of carbon. Such activities will necessarily involve mobilization of a large number of people in managing regions which have, up to now, often been left in pristine or lightly-managed states. This activity will be costly, difficult to coordinate, and will most definitely require local expertise regarding the efficacy of intervention within each peatland complex. The potential for mismanagement will create additional risk, especially considering the challenging interactions of maintaining a pseudo-pristine landscape. Whole new sectors of economic activities will need to be developed in order to support peatland-based ecological intervention, particularly if efforts would focus on more pristine sites. Additionally, the history of ecological interventions is also littered with unintended consequences, and includes introduced species causing ecological havoc and even extinction, growing antibiotic resistance, and the effects of slash-and-burn agriculture on the world's rain forests. The striking consequences of these short-sighted efforts should provide a lesson in humility in our collective ability to sustainably manage disruptions to natural settings.

This set of arguments may provide some cause for concern when considering the ecological engineering of peatland landscapes for improved carbon sequestration. However, I am more optimistic about the potential for another landscape sector in driving carbon-capture efforts: agriculture. A decade ago, an estimated 26% of the world's land surface was already actively managed for the production of food (World Resources Institute 2000). These agricultural lands do provide many ecological services, but are considered somewhat more ethically and practically amenable for human intervention based on their use history. Changing agricultural practices to re-grow their soil organic matter pool has two great advantages which can be reached in parallel: (1) carbon sequestration or at least prevention of further carbon loss to the atmosphere and (2) preservation of soil fertility which is the basis for world food production. Successful pilot studies on a number of changes to traditional agricultural practices have shown the potential for this sector to generate scalable outcomes, in part to restock pre-agricultural carbon stores (Lal 2004; Sun et al. 2010), though other research and reviews are more cautious on the real prospects for successful soil carbon sequestration (Powlson et al. 2011). That said, agriculturally-oriented alterations showing potential include albedo modification (through crop or breed switching) to increase

surface reflectance (Ridgwell et al. 2009), biochar production to increase the resilience of agricultural cuttings and residues to decomposition (Lehmann 2007), reducing tilling to prevent oxygen penetration into the subsurface (Govaerts et al. 2009), and changes to ruminant diets to reduce methane emissions (Iqbal et al. 2008). I believe that encouraging changes in these realms is also more politically feasible than to push for peatland-based sequestration, and will be much easier to manage within existing political-economic structures (such as tax and land-use policy).

Can peatlands research provide a role in assisting agriculturally-based sequestration methods? Undoubtedly the answer is yes, and I am grateful to Professor Freeman for his thought-provoking and intellectually rich contribution to this conversation. This community has great expertise with natural forms of carbon and the processes and parameters driving their decomposition. A number of landscape scale process descriptions from this community should be directly applicable to certain forms of agricultural efforts, particularly in rice production and fish farming. Moreover there is opportunity to expand research efforts into understanding the special role of phenols in constraining peatland decomposition, and this research should have great scientific and practical consequence. Much of this knowledge can be used in already-managed landscapes, including managed wetland or peatland restoration projects (Rochefort et al. 2003).

My suggestion is to encourage the gentle nudge of softer-path manipulations (re-seeding native species, careful water level manipulations) than the blunt instrument of biochemical and genetically-derived modifications to the production of phenols. In all cases I strongly suggest adhering to the precautionary principle in landscape-scale sequestration schemes, and prefer to change what we already change (i.e., agricultural landscapes) rather than to change what we have managed to escape changing (i.e., relatively pristine peatland and wetland ecosystems). Most of all, I encourage a political solution to adopt a sustainable and carbonless energy supply, though recognize that increasing carbon capture and storage will help in the eventual reduction of atmospheric CO^2 to pre-industrial levels.

Acknowledgements

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References

Andersen, R., M. Poulin, D. Borcard et al. 2011. Environmental control and spatial structures in peatland vegetation. Journal of Vegetation Science 22:878-890.

Bragazza L., C. Freeman, T. Jones, et al. 2006. Atmospheric nitrogen deposition promotes carbon loss from peat bogs. Proceedings of the National Academy of Sciences 103:19386.

van Breemen N. 1995. How Sphagnum bogs down other plants. Trends in Ecology & Evolution 10:270-275.

Dise N.B. 2009. Peatland Response to Global Change. Science 326:810-811.
Dunn C., and C. Freeman. 2011. Peatlands: our greatest source of carbon credits? Carbon Management 2:289-301.

Freeman C. 2011. Peatland carbon sequestration: Some future options, Plenary Lecture at the 2011 Joint meeting of the Society of Wetland Scientists, WETPOL and Wetland Biogeochemistry Symposium (Prague, Czech Republic).
Freeman C., N. J. Ostle, N. Fenner, and H. Kang. 2004. A regulatory role for phenol oxidase during decomposition in peatlands. Soil Biology and Biochemistry 36:1663-1667.

Govaerts B, Verhulst N, Castellanos-Navarrete A, et al. (2009) Conservation Agriculture and Soil Carbon Sequestration: Between Myth and Farmer Reality. Critical Reviews in Plant Sciences 28:97-122.

IPCC (2007) Climate change 2007: The physical science basis. Contribution of Working Group I to the fourth assessment report of the Intergovernmental Panel on Climate Change. New York: Cambridge University Press
Iqbal MF, Cheng Y-F, Zhu W-Y, Zeshan B (2008) Mitigation of ruminant methane production: current strategies, constraints and future options. World J Microbiol Biotechnol 24:2747-2755.

Kimmel K, Mander Ü (2010) Ecosystem services of peatlands: Implications for restoration. Progress in Physical Geography 34:491 -514.
Lal R (2004) Soil carbon sequestration to mitigate climate change. Geoderma 123:1-22.

Lal R (2008) Carbon sequestration. Philos Trans R Soc Lond B Biol Sci 363:815-830.

Lehmann J (2007) Bio-energy in the black. Frontiers in Ecology and the Environment 5:381–387.

Powlson DS, Whitmore AP, Goulding KWT (2011) Soil carbon sequestration to mitigate climate change: a critical re-examination to identify the true and the false. European Journal of Soil Science 62:42-55.

Ridgwell A, Singarayer JS, Hetherington AM, Valdes PJ (2009) Tackling Regional Climate Change By Leaf Albedo Bio-geoengineering. Current Biology 19:146-150.

Rochefort L (2000) Sphagnum—A Keystone Genus in Habitat Restoration. The Bryologist 103:503-508.

Rochefort L, Quinty F, Campeau S, et al. (2003) North American approach to the restoration of Sphagnum dominated peatlands. Wetlands Ecology and Management 11:3–20.

Sun W, Huang Y, Zhang W, Yu Y (2010) Carbon sequestration and its potential in agricultural soils of China. Global Biogeochem Cycles 24:12 PP.

Wetzel R (1992) Gradient-dominated ecosystems: sources and regulatory functions of dissolved organic matter in freshwater ecosystems. Hydrobiologia 229:181-198.

World Resources Institute (2000) A guide to World resources 2000-2001: people and ecosystems: the fraying web of life. World Resources Institute

SWS WiW Writer's Exchange

The SWS Writer's Exchange is a web-based writing tool for wetland ecologists, sponsored by the Women In Wetlands Section (WiW). Section members can have their unpublished manuscripts reviewed by other members before publication, in exchange for reviewing another member's unpublished manuscript. Students and non-native English speakers may find friendly manuscript reviews especially useful before submitting their articles for journal review.

All SWS members belonging to the WiW section can participate including students and scientists of any gender. Section membership costs $5.

The website address is: http://www.sws.org/sections/wiw/we_main.mgi

Questions? Email Beth Middleton, section chair of WiW: middletonb@usgs.gov

Editor's Choice

Editor's Note:

This is a much more personal note than I've written before and I beg your indulgence.

I happen to work at Penn State University and live in State College. If you've paid any attention at all to the news recently, you'll know that both my employer and my community have been rocked by allegations of improper conduct by a former assistant football coach. The fallout has led to the downfall of our president as well as our (legendary) football coach. The ramifications of this will resonate for years.

In our small community, we are surrounded by the ridges leftover from when the Appalachian Mountains were tall. Water flows through our lives with abundance. You cannot go anywhere out of town without running into field and forest and endless opportunities to interact with nature. From the mice in my basement (which the well-fed cat chose to ignore) to the bear wandering through town, we interact with the natural world on a variety of levels, each and every day. We have the opportunity to pass along this love of nature to our kids, and many of us do just that. Our school curriculum covers everything from wetlands to watersheds and the kids get a wide variety of field trips to see and explore their natural world (my son is on a field trip to the local grocery store as I write this – that's cool, too). The summer camps at the local nature center get filled up before the end of the calendar year – that's how popular they are. We are, perhaps, an insular community, but Happy Valley means something here. We don't get floods, tornadoes, earthquakes (well, not many), it's not too hot nor too cold, not too wet nor too dry, we don't have but a few poisonous animals and plants. The people are good, solid folks. This is a good place to live and raise a family. We co-exist relatively well with our more natural neighbors – all the police did with that bear was make sure it didn't bother anyone.

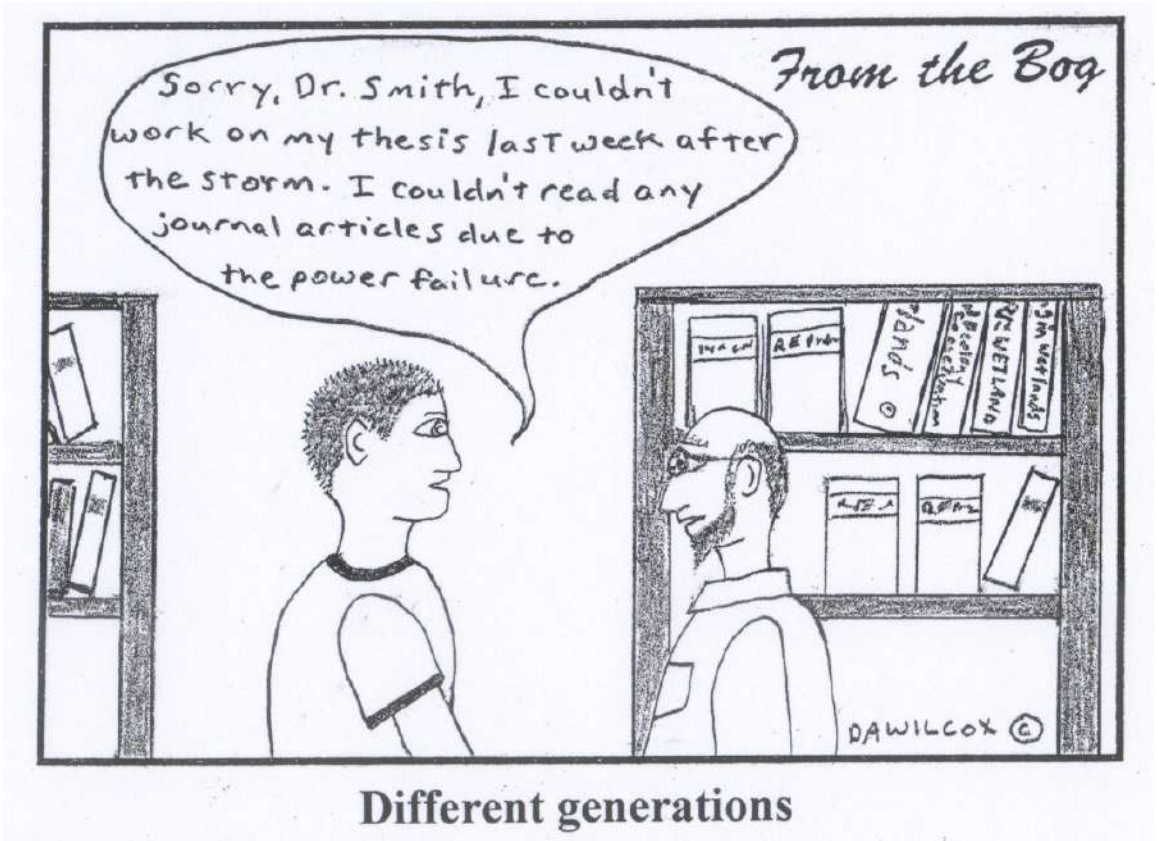
I write this all down because there's more to Happy Valley that what you've read in the paper or seen on the news. We're as stunned by what has been alleged here as is anyone. But we're also increasingly angry that we're being defined in a way that does not reflect who…and what…we are. As an education community, we should be driven by the facts…by what we know to be true. I ran this note past Ben LePage for his thoughts and he said it much better than I.

"There is a great message here that should be iterated and that message is that we as scientists rely on the facts ... and our opinions should not be formed on the basis of

public pressure or from the media, but by the scientific process. By jumping on the bandwagon, we abandon our scientific principles and conform to mass hysteria.... as scientists, we are better than that."

We are… indeed.

Image: Floating Wetlands. Photo: Ben LePage



Different generations

WETLAND SCIENCE AND PRACTICE

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