

## **Laudation for Robert K Peet**

### **Recipient IAVS Honorary Membership award 2016**

I'm very honoured to introduce Bob Peet as the 2016 recipient of the IAVS Honorary Membership award. Honorary Membership is the highest award the IAVS can bestow and recognizes sustained contributions of extraordinary merit to the Association or to the field of Vegetation Science. Bob is a worthy recipient on both counts. Today, I will highlight some of his achievements, although I'm unlikely to do them justice.

Bob was born and raised in Wisconsin and received his Bachelor of Arts and Masters degrees at the University of Wisconsin in 1970 and 1971 respectively. He then moved east to Cornell University in upstate New York, where he completed his PhD in 1975 under Robert Whittaker. His first appointment required a move south to the University of North Carolina at Chapel Hill. This must have suited him as he remains there to this day.

#### *Contributions to Vegetation Science*

Bob has spent his career focussing on issues at the fundamental core of our discipline. His contributions are exemplars in combining the clear conceptually-based thinking required to define meaningful ecological questions with robustly designed studies underpinned with real, hard-won, meticulously-collected data. Early in his career, he was highly influential in our thinking of how to best to quantify species diversity. He has gone on to encourage us to consider the wide range of drivers of species diversity at different scales, the generality of these mechanisms, what leads to vegetation being hyperdiverse and how diversity can influence other ecological properties and processes, such as invasion.

In the 1970s and 80s, Bob played a significant role in the reformulation of successional theory through adoption of mechanistic approaches. Specifically, he provided a framework to explore whether community structure and ecosystem function outcomes of succession could be predicted from population processes, themselves predictable from species attributes such as life history and physiology and interactions with the environment. This was important to allow us to move 'beyond species' in our understanding of succession and discover more general principles.

Another important theme in Bob's work has been the significance of spatial grain and extent and how these influence ecological pattern and process. He recognised the need for vegetation plot methods that would allow us to tease apart the importance of different processes at different spatial and temporal scales and the flexible methods that he and collaborators devised are now widely applied. Bob and his students and collaborators have increased understanding of the importance of spatial scale in understanding a multitude of patterns and processes – examples include elucidating relationships between composition and the environment, species diversity and invasion, and the consistency of fine-scale species areas relationships.

Bob has also made major contributions to the application of vegetation science. He was acutely aware of the risks of not having robust, defensible classifications of vegetation to underpin environmental and conservation planning in North America. This led him to propose and organise (with collaborators) the Ecological Society of America's Vegetation panel. This panel provides professional oversight of vegetation classifications used by a raft of agencies, organisations and academic institutions.

Bob has been at the forefront of the development of the discipline of ecological informatics, being one of the lead instigators of the North American VegBank project and of the Botanical Information and Ecology Network (BIEN) which for the first time pulled together an integrated dataset of all available digital plant occurrence and co-occurrence records in the New World. He collaborated in the development of data exchange standards for vegetation plot data, the development of the Global Index of Vegetation Plot Databases and the global sPlot initiative. Among ecologists, Bob was the first person to highlight how changing taxon concepts hinder our ability to meaningfully integrate vegetation plot data across large spatial and temporal scales and to implement an approach to overcome this barrier. Perhaps closest to Bob's heart is the Carolina Vegetation Survey which he established over 25 years ago and continues to coordinate.

#### *Services to IAVS and other societies*

Bob attended his first IAVS meeting (working group for data processing) in 1979 in the Netherlands. He was very impressed with how IAVS was so international, so forward looking and so collaborative. This quickly made it his favourite professional organisation and is the reason he has worked so hard in service to IAVS. His first contribution was to serve on the editorial board of *Vegetatio*, the then journal of IAVS, from 1981 to 1989.

In 1983, David Glenn-Lewin and Bob established the North American Section to increase the profile of IAVS. This section often works with the Vegetation Section of the Ecological Society of America (also established by Bob in the same year) and jointly they have sponsored field trips, symposia, student awards and workshops in vegetation science at the annual ESA meetings and have promoted the development of a US National Vegetation Classification.

In 1989, Eddy van der Maarel, Bob and Robert Neuhäusl moved most of the *Vegetatio* Editorial Board to the new Journal of Vegetation Science which they started in 1990. JVS became the official organ of IAVS and gave IAVS more control over the price and an ability to provide free subscriptions to those in developing countries. Clearly JVS has been a major success. Bob served as one of the initial three Chief Editors until 1995 and he continues to serve as a Consulting Editor for both JVS and AVS

In 1995 Bob and Paul Harcombe organized annual IAVS symposium in Houston and the associated field excursion from Texas to North Carolina.

In 2003 Bob established the Ecoinformatics working group and served as its chair until 2012.

In 2007, Bob was elected President of IAVS and served until 2011. Bob led the effort to reorganise and revitalise our society, resulting in a profound transformation. Two major advances included:

- Arranging that IAVS journals were published by Wiley Blackwell. This provided access to the latest technology for electronic distribution and a stable company, broader circulation and significantly greater income. This income has allowed IAVS to support a much wider range of activities for its current members and to attract new ones.
- Changing the Statutes and Bylaws as well as creating standing committees that have made IAVS more participatory and efficient.

From 2011-2015, Bob served as vice-president and publication officer. He continues to freely give his help to the Governing Board; his memory of details of a number of matters is often better than ours. He has served on IAVS's Special Committee on Business Management, the Awards Committee, the Publications Committee, and the Organising Committee of numerous annual symposia.

Bob has also provided service to other organisations. His extensive service to the Ecological Society of America led to him being awarded a Distinguished Service Citation in 1995. He has also served as a director or advisor for numerous other societies.

#### *The Plant Ecology lab at UNC*

Bob has supervised at least 9 Postdocs, 29 Ph.D. students, 21 Masters students and 8 undergraduate honours students. Bob has always led his students by example (emails at all hours of the evening) and worked behind the scenes to support their projects. He led many memorable field trips, often in association with his course Progress in Ecology, abbreviated to P.I.E. This course involved learning about the vegetation of some distant place while eating fruit pies, all prepared during parties at Bob's house. Come Spring Break, everyone would hop in a van and drive to that distant place to explore the vegetation.

29 years ago, Bob and his collaborators on the Carolina Vegetation Survey instigated the yearly 'PULSE' events where the core scientists and volunteer botanists from across the region intensively study a portion of North Carolina for a 10-day period. Sometimes referred to as a "Bootcamp for botanists" or "Botanical Woodstock", these events have not only produced a lot of data from often poorly understood vegetation types, but also provide a great opportunity to interact with others deeply interested in vegetation. With these trips he demonstrated, especially to his students, the value of being in the field.

When I agreed to introduce Bob as the recipient of this award, I contacted Peter White, one of his very close colleagues at UNC for input. What Peter wrote communicated the essence of Bob to me so well, that I'm simply going to read it.

“There are really two Bobs: Bob-1 is the guy with the lab loaded with field equipment, the row after row of filing cabinets filled with plot data, and the room full of computers that makes his lab a hub of vegetation science. This is a serious Bob and one who thinks deeply and insightfully about vegetation ecology, sharing that with students. And then there is Bob-2. Bob-2 is about 20 years younger than Bob-1. He's the excited (almost bubbly) guy in the field, leading field trips, always cooking up a reason to go touring through the vegetation of the Southeast, whether for credit as part of courses or during various academic holidays or based on the visits from vegetation ecologists from afar. Both Bobs are extremely generous of time, expertise, and data, raising the boats of all grad students who enter the program. He founded and is the heart and soul of the UNC Plant Ecology Laboratory.”

And with no further ado, we'll hear from Bob.

I appreciate the input of Martin Diekmann, Peter White, Laco Mucina, Jason Fridley, Michael Lee, Rob Allen