Natural Areas Newsletter
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Better Together: Advancing Conservation Through Vision, Tenacity & Adaptability

Meet Glenn Patrick Juday, Ph.D., Professor Emeritus of Forest Ecology, University of Alaska Fairbanks.
Lifetime Member of the NAA since 1983.

Glenn Juday at Frank Lloyd Wright's Fallingwater during the 2019 Natural Areas Conference.

Glenn Juday (Joo-day) is an emeritus professor of forest ecology whose research interest extends into long-term climate change, community ecology, and the natural and management controls of biodiversity. A prolific writer and speaker who has devoted his career to the preservation of natural areas, Juday continues to contribute to emerging research in environmental monitoring, climate change and forest growth, and forest regeneration following fire and harvest.[1] Too numerous to mention, a list of his work can be found here. However, this story, while embracing the vital and important contributions of his research, is focused on the journey of a man who loved nature and felt compelled not just to study, but to actively engage in a movement that sought to preserve endangered natural areas - a movement that continues evolve and adapt, much like the natural areas he seeks to protect.

Growing up in the flat prairies and farmlands of Indiana, Juday had an early love of nature, however, his heart was captured by the forests of Michigan when his family vacationed in that area of the country while he was in high school. As he recounts, "My teen years were in the height of the post-WWII economic and demographic boom." Americans were on the move, both physically and financially. Homes, highways and commercial construction of all kinds exploded to meet growing demand. "Even at that

[1] https://news.uaf.edu/expertsguide/glenn-patrick-juday/

early age, I was acutely aware of the threat to nature. Natural lands were disappearing rapidly, victim to progress and suburban sprawl."[2]

When it came time for college in the late 60's, Juday enrolled at the local land-grant school, Purdue University. "At the time, there were very few majors available for those interested in nature. It was wildlife, fisheries or forestry. Forestry barely included, but was not focused on, preservation. Instead, the overriding objectives were advancing production, including tree harvest, scientific forestry, agriculture and specialties related to the outputs of trees, animals and plants for manufacturing."[3] The economy was booming, and it needed to be fed natural-resource inputs. Given his love of trees and forests, Juday opted to study forestry.

Those who were attuned to the land and understood that these natural resources were finite, realized that nature was paying the high price for progress. There was an understanding that just conserving acres of land in parks, which were mostly thought of as settings or backdrops for recreation facilities, was not enough. Somehow habitats, animals and ecosystems throughout the country needed to be preserved or be lost forever. This awareness gave birth to the first Earth Day in 1970, and Juday organized Purdue University's activities for the day, and he wrote an editorial for the student newspaper focused on the destruction of prairie land. As Juday says, "Preservation was thought of in terms of remnants. It was not a synchronized or systematic effort."

As a part of his degree, Juday took a course from the pioneering ecologist at Purdue, Alton Lindsey, who wrote *Natural Areas in Indiana and Their Preservation* (1970), and who is largely credited for nature preserves in the state. Inspired by Lindsey's work, in 1971, Juday endeavored to restore a patch of prairie in an unexcavated corner of the Purdue gravel pit and pond near a power plant. Having little research or experience to draw from, since land restoration was not really a "thing" back then, Juday began with a prescribed burn, unheard of at the time, and then replanted native species from seeds and native plants he had collected as source material. "The effort was primitive by today's standards, but the results were positive, so much so that there was a great deal of motivation, both individually and among colleagues, to keep trying and keep learning, because restoration seemed possible." This was revolutionary for the time.

Just prior to this time, George Fell, the founder of the Natural Areas Association (NAA), established the first state-legislated natural area program in nearby Illinois; and Bob Jenkins became the Vice President for Science at the Nature Conservancy. Fell saw the need for institutions to pursue and expand nature preservation; so he pushed to create similar state programs throughout the country. Jenkins led a biological inventory across the United States, introducing greater scientific rigor to land acquisition, and

[2] Interview
[3] Ibid.

conservation. “The 1970s were an amazing time of transition in conservation. I was just lucky enough to be around some of the great visionaries.” As a poor graduate student, Juday scraped together the annual dues to join The Nature Conservancy, linking him with many of the leaders in the natural areas movement. “I have one of the few complete collections of The Nature Conservancy magazine,” he notes.

After Purdue, Juday moved to the Pacific Northwest and began working on his Ph.D. at Oregon State University. As he studied, he continued to follow the work of Fell and Jenkins. The example of the Illinois state natural areas program, in which Fell played a key role, inspired other states, and soon more and more states began to create similar programs. Juday noticed that Oregon did not have a state program, so he decided to start one. When he contacted his local state legislator, he found out that there was a model state naturals areas legislation effort underway. Juday registered as a lobbyist and went to work to fight for the bill. “Much of 1973 was spent driving to the state capitol, showing the bill to other legislators, campaigning for support, attending hearings, securing witnesses, responding to questions, recognizing concerns, and adopting revisions. You know, all the things you do to get a piece of legislation into law – and it passed.”[4]

As he drove around the state and studied that landscape, Juday was struck by the diversity of the ecosystems of the northwest. He recognized that there were rare and unique habitats being ignored because the areas were not conducive to becoming a park, campground or some other function for human use, which was very much the focus of the times. In addition, Juday began to realize that the old-growth forests in the Pacific Northwest, and specifically in Oregon, were rapidly disappearing. Left alone, trees had the capability to live 200 to 600 years; however, economically preserving trees for such a long time had too high of a cost for the dominant resource-management perspective of the time. The older a tree became, the more likely it would contract a disease and lose its value in lumber - although actually, the assumed risk was greater than the reality. Eventually, in the drive for efficiency in wood production and use of capital, the thinking was that trees should be harvested at 60 to 80 years of age, because that would be the optimum intersection of accelerating growth and return on investment. It was assumed, that regardless of the biology of the forest, let alone the trees themselves, the overwhelmingly dominant form of forest management needed to be harvesting trees at their optimum growth point and then replanting, maintaining a supply of healthy trees and quality lumber. The assumption was that there was no unique ecological value to an older forest, and in fact, to preserve an older forest was

[4] Interview

unscientific or even unenlightened. At the time, the policy of the U. S. Forest Service toward old-growth forest was officially titled “Liquidation.”

At Oregon State, Juday worked with scientists who were leading a revolution in understanding the value of older forests. “The Pacific Northwest was timber central at that time,” Juday said. “It was big business, a key part of the regional economy. Researchers were tremblingly raising their hands and presenting findings for forest management on federal lands. Up until then, old-growth forests were viewed as a nuisance or a storehouse for timber.[5] He decided to focus his dissertation on evaluating the prevailing assumptions around old-growth forests, and this scientific exploration landed him in the middle one of the more controversial issues of the 20th century.

Juday and his mentors were not anti-logging, but as scientists, they set out to examine the unexamined assumption related to old-growth forests and to determine their value beyond timber. His findings contributed to new ideas in forest ecology that had world-wide implications, but it took a while to get there.

Fast forward twenty years, now a professor at the University of Alaska Fairbanks, and many scholarly publications later, Juday was invited to speak the 1992 Swedish Royal Academy of Sciences as they considered their basic national forest law. Having followed the controversy in the Pacific Northwest, Swedes sought to examine their forest policy to balance biodiversity with economic goals. As a result of this meeting, Sweden completely changed its forest-management law and established biodiversity and lumber production as equal goals. Similar developments revolutionized the management of public forests throughout the world. It was a radical change that virtually no one ever thought would happen.

Now as emeritus professor, University of Alaska Fairbanks, and beginning to contemplate what true retirement might look like, Juday has maintained his intellectual focus on the question of climate change, a line of work he began more than 40 years ago. Another highly-charged issue where world views clash and tensions are inescapable. However, he approaches this question with the same equanimity as he did the preservation of the prairies and forests, understanding that any solution must balance a wide variety of complex needs, and so he continues to write and lecture on such topics.

However, when asked what he wants to share with the next generation of natural areas scientists and land management professionals, Juday highly encourages them to connect and build networks through organizations like the NAA. “What Fell and other visionaries knew is that progress can only be made when we can think beyond the narrow missions of our business, agency (federal, state, regional & local), nonprofit or academic institution. NAA’s unique mission offers a place where science and land

[5] https://afes-news.blogspot.com/2014/12/glenn-juday-prepares-for-retirement.html

management can come together and openly discuss, evaluate and consider scientific findings and perhaps even radical (fundamental) ideas, while ultimately learning from each other."

"What no one tells you, but you will certainly find out, is that conservation is a brutal business. In our work there is inevitable controversy, and controversy has winners and losers. This can lead to bruised and broken hearts, damaged reputations, and vicious retaliatory actions. It is a tough road being navigated by people who passionately care about what they are fighting for. NAA is where you will find friends, colleagues and fellow crusaders. Like-minded visionaries who will help you see your progress when you cannot; where you can regroup, retrench and reevaluate strategies; and where you can be reminded that you can lose a battle and still win the war. When I wrote my dissertation on old-growth forests, I never imagined that twenty years later, forest policy would embrace the ideals I discussed. But it does happen, and can happen, and you must never, never, never give up."

When asked what Juday wants to tell all of those fighting hard to preserve natural areas and impact climate change, he pauses a moment and says, "Conservation is a human endeavor. You need to pace yourself. Don't burn out. Don't fall into the trap of thinking what you are doing will not make a difference. It may not be the way you envisioned, in the time frame you want, or meet your criteria. But what you are doing is important, and it is all additive. Build on the successes. Keep the momentum going. That is what the pioneers in the field taught me - tenacity, vision, openness, adaptability, keep going … that is how we reach our goals."