

Natural Resource Research & Management

Strategic Plan 2018



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Introduction

The year 2016 marked the 25th anniversary of the Joseph W. Jones Ecological Research Center, and 2017 saw the retirement of its founding director. These milestones offer the opportunity to reflect on the Jones Center's many accomplishments, and more importantly, to step forward and strategically assess what the Jones Center needs to focus on to build on its storied successes and grow its impact into the future. To that end, the Jones Center has developed its first formal strategic plan.

Background

The land we call Ichauway has long been a crossroads. Archaeological evidence suggests a near continuous human presence from 12,000+ years ago. Evidence of humans is abundant on the banks of the river and creek. Archaeological and ethnographic evidence also suggest a long tradition among native peoples for harvesting medicinal plants, growing crops, and managing the land with prescribed fire. The arrival of European settlers led to a massive shift in the ways the forests were managed, with extraction of timber and turpentine, conversion to row-crop agriculture, and fire suppression all bringing changes to the landscape.

Robert W. Woodruff, the long-serving president and guiding force of The Coca-Cola Company, began acquiring the land he developed into Ichauway Plantation in the 1920's. Although primarily a businessman, Mr. Woodruff enjoyed hunting and relished the solitude of nature. At the time of his purchase, this land, like much of southwestern Georgia, had been subject to extensive extraction of resources. Woodruff and his land managers encouraged forest regeneration and actively managed the property to enhance wildlife habitat. This allowed the land to recover during its time as a quail hunting property and Woodruff's personal retreat and passion until his death in 1985. During his time at Ichauway, Mr. Woodruff also promoted self-sufficiency by encouraging the Ichauway community to grow crops and tend livestock. He quickly realized the health challenges - such as malaria - of rural communities, and established the Emory University Field Station in 1939 to examine the effects of environmental conditions on human well-being. He also strongly believed in the role of philanthropy in improving people's lives and demonstrated this frequently by example.

In addition to Mr. Woodruff's conservation legacy at Ichauway, the thoughts of several others have contributed to the development of the Ichauway conservation ethic. Through work on private hunting properties in southwest Georgia and north Florida, Herbert Stoddard, Ed and Roy Komarek, and Leon Neel developed and practiced one form of what has become modern ecological forestry. Central to their approach is the idea that forest management modeled after natural processes and disturbances can sustain the longleaf pine ecosystem while meeting timber,



wildlife and biodiversity objectives. Many of Ichauway's current Conservation staff are direct descendants of this philosophy of conservation management. Aldo Leopold, who is widely credited with establishing the rationale for the modern conservation movement, made the case that the 'land' is not a commodity but instead a community with intrinsic value. According to Leopold's land ethic, humans are a part of and dependent upon the land which should be managed in ways that provide opportunity for sustainability and resilience, concepts that were, in part, shaped by visits made to the Red Hills region to interact with Stoddard and others. Finally, Eugene Odum (the originator of modern ecosystem ecology) pioneered the concept of using modern ecological thinking and understanding to address natural resource management and conservation issues. Odum was an advisor to the Robert W. Woodruff Foundation in their deliberations regarding Ichauway's future that ultimately led to the formation of the Jones Center, and he was a charter member of the Jones Center's advisory committee.

These diverse yet complementary lines of thought developed from different professional experience—Robert Woodruff's commitment to conservation, the Stoddard-Neel holistic approach to research management, the Leopold land ethic, and Odum's proposition for scientific-based management and conservation—come together in the Ichauway conservation ethic. Broadly stated, this ethic calls for stewardship that sustains the longleaf pine ecosystem in its entirety and in perpetuity using management actions based upon our best available knowledge while adapting our management actions as we gain new understanding or as objectives and conditions change. Supporting this legacy and conservation ethic, the Robert W. Woodruff Foundation provides the core financial support for the Jones Center programs and facilities.



Our Strategic Plan

The Jones Center is distinct in the community of ecosystem research organizations. We are built on a strong foundation established by Robert W. Woodruff, who committed to conserving this land and improving the lives of those within Ichauway and surrounding communities. His foresight, followed by the vision and dedication of the Robert W. Woodruff Foundation, led to the establishment of a world class research and conservation institution at Ichauway. Over the last 27 years, the Jones Center has earned a distinguished reputation and has grown its impact on the scientific understanding and management of natural resources in the southeastern U.S. With a new director, and the development of a new strategic plan, we strive to expand our distinguished reputation. We will evaluate our current programs and identify and prioritize the ongoing and new work deemed most important to our mission, while eliminating or scaling back aspects of our work that do not move us toward our vision and goals.

Our strategic plan is a vision for the future. We feel a deep responsibility to continue our tradition of excellence, and our commitment to stewardship of land, water and wildlife will not waiver. We acknowledge that our foundation and ethic are firmly rooted in both the land and the experiences of those who preceded us. We recognize the need to anticipate future challenges in our unique role as crossroads between researchers that acquire knowledge and enhance understanding, and managers that demonstrate and practice natural resource management and conservation. The core of our ethic is to apply this philosophy to future conservation and land management challenges.



The Ichauway Ethic

We regard the forests of the southern coastal plain as complex systems of interdependent parts. Our conservation and management actions reflect the intrinsic merit of all elements of the longleaf pine ecosystem in the context of wise use of natural resources. We demonstrate and promote actions that sustain the integrity, diversity, functions, aesthetic, and historical significance of Ichauway.

We believe that:

Informed conservation and natural resource management are critical to human health and well-being

Humans have a moral obligation to manage resources sustainably, offering future generations the full range of resource options that we now enjoy

Stakeholders need a source of objective information for conservation and natural resource management issues

Decision-making originating from an objective and informed framework improves conservation and natural resource management outcomes

A civil and respectful setting is necessary when discussing conservation challenges, while also acknowledging that they can be complex, difficult to resolve, and must be balanced against other societal needs

The Jones Center is an unbiased convener and neutral broker where people can comfortably explore trade-offs while reaching consensus about conservation issues

The best use of Ichauway is to understand our natural resources, demonstrate excellence in their conservation, and promote the best science-based management approaches

The best measure of our success lies with our ability to foster sustainable conservation and management of land and water

Our Mission

One key outcome from the strategic planning process is that all associated with the Jones Center agree that the Jones Center's mission shall not change. We will continue:

To understand, demonstrate, and promote

excellence in natural resource

in natural resource management and conservation



The Jones Center at Ichauway is a research and conservation site of regional, national, and international significance. Ichauway's 29,000-plus acres contain almost 18,000 acres of mature longleaf pine woodlands, 4,000 acres of young restoration plantings of longleaf pine, 100 depressional wetlands, 29 miles of rivers and streams, and 3,000 acres of field and food plot habitat. Most of Ichauway is dedicated to research and educational demonstrations. This land base is complemented by 50,000 square feet of research and education facilities, 400 miles of roads, and a full-time staff of 84, plus numerous graduate students and temporary workers.

Research programs at the Jones Center focus on two broad themes:

The ecology, restoration, and management of the longleaf pine ecosystem and its associated wildlife

Water resources, wetlands, and aquatic ecosystems of the southeastern Coastal Plain These areas of focus reflect both the Jones Center's geographic location and the information needs of the region. Ichauway is located in the heart of the historic range of longleaf pine. Longleaf pine ecosystems are among the rarest and most biologically diverse in North America and are increasingly a focus of conservation efforts. Southwest Georgia is also a hydrologically unique karst region that serves as the major recharge area for one of the nation's most prolific and heavily used aquifers, the Upper Floridan.

We balance basic research of these systems to deepen our understanding, with applied work that emphasizes relevance to the natural resource management and conservation communities. Much of the Jones Center's research is integrated under several long-term projects that incorporate elements of terrestrial, aquatic,



and wildlife research in an interdisciplinary approach. Research collaborations extend beyond the Jones Center and include a growing network of colleagues at academic institutions and conservation organizations across the country. Our work combines traditional forestry and ecological sampling techniques with newer technologies such as eddy flux towers and unmanned aerial systems. Diverse modeling approaches are used to analyze and interpret the volume of data generated by our long-term and intensive acquisition network. Knowledge generated from our research program is disseminated through peer-reviewed journal articles, technology-transfer events and products, and popular publications, and by participation in local, regional, national, and international meetings with scientific and non-technical audiences. Our programmatic philosophy emphasizes collaboration between Jones Center staff and information users. Our work seeks to address important natural resource management and conservation questions so that our stakeholders can utilize science to support the development of sustainable resource management and conservation plans and policies.

The Jones Center's conservation program is responsible for the stewardship and management of the Ichauway land base. It serves as a technical resource for Jones Center staff and visitors as well as demonstrating sound resource management in the region. Integration of research and natural resource management at the Jones Center presents a unique opportunity for these programs to inform one another. Information from our programs can be developed for operational implementation and demonstration on Ichauway. These management applications provide valuable feedback and generate additional questions. The Center's conservation program incorporates a diverse range of activities into a management model that balances multiple values of our deeply-rooted land ethic. Land management activities include an extensive prescribed fire program, conservation-based forest and wetland management, and restoration and expansion of longleaf pine and embedded ecosystems across the Ichauway landscape. Our wildlife program includes game management for species such as bobwhite quail and white-tailed deer as well as management and monitoring of nongame, rare, threatened, and endangered species, such as the red-cockaded woodpecker and gopher tortoise.

Information from our research and conservation programs is shared through our education and outreach programs. The Jones Center's priority outreach constituents are practicing professionals who are making decisions that influence the management and conservation of natural resources. We also educate university students in natural resource degree programs to help prepare the next generation for future decisions and challenges. Natural resource management agencies, policymakers, private land owners, conservation organizations, and university classes visit Ichauway for field tours, short courses, and workshops.

Our outreach efforts influence conservation and management at a range of scales. Jones Center staff are actively engaged in collaborative partnerships at the state, regional, and national level, complementing our work onsite at Ichauway. Our work with educating and advising university students further helps prepare the next generation of professionals and further magnifies our influence by broadening the impact of our ethic and practice. Approximately 110 students have completed advanced degrees through our cooperative graduate education program, and we continue to have many graduate students pursuing degrees at any given time. Key cooperating institutions include the University of Georgia, University of Florida, University of Alabama, and other nationally-ranked programs. Our graduate student alumni provide a unique legacy that continues to influence the management and conservation of natural resources through the course of these individuals' careers. In addition to formal training, temporary technicians in our research and conservation programs also are exposed to our land management and conservation ethic. These individuals often leave the Jones Center to take positions in natural resource management or graduate school elsewhere, further advancing our impact. The development of well-trained professionals through our cooperative graduate program, experiential learning employment opportunities, and our Ichauway Conservation Fellow internships, are some of the Jones Center's most important contributions.



Our Vision

Ichauway will serve as a working forest, and an outdoor laboratory for research, educational demonstrations, and conserving and restoring regional ecosystems. Maintenance of our strong traditions will be joined with new realizations about how we can most effectively carry out our new vision:

To support and inform

natural resource conservation and restoration by **excelling as a trusted source** of science and management information



Our Plan

Our fundamental approach is to leverage our land, our work, and our people to achieve real impacts on the conservation, management, and restoration of ecosystems within the historic range of longleaf pine forests. After over 25 years of rigorous research and demonstrated excellence in restoration and management of Coastal Plain ecosystems, we now intend to maintain and build upon our reputation for credible, independent, impactful science. We will disseminate the best of what we've learned to a broader universe of stakeholders. Our core strategy is to expand our relational touch through all areas of the Jones Center's operation. We currently investigate, manage, utilize, teach, and learn in the best traditions of Mr. Woodruff and the legacy of the Jones Center on Ichauway. We will now purposefully seek to grow our impact, in both traditional and new ways, on those that influence the natural resource research and management communities.



Ichauway attracts attention from experts and laypeople, managers and scientists, teachers and students who love the land. Each Jones Center area of expertise touches unique communities of stakeholders beyond our property lines and beyond our networks. We intend to become better known, in more communities, through engaging and capitalizing on our stakeholders' appreciation of Ichauway, its ethic and its attributes. We will use the results of our 25-plus years of research and stewardship to build the momentum for our expanding impact.

Our strategic plan depends on:

Capitalizing on the natural attraction of Ichauway's legacies and capabilities

Sharing our conservation ethic and excellent stewardship with all

Building upon the passion for the Jones Center, our philosophy, and our work

Maintaining rigorous research, conservation, and education programs

Incorporating new methods and approaches and inviting new collaborations to our current research and management to robustly challenge dogma, advance scientific understanding, and better inform future conservation, restoration, and natural resource management activities



Goal

Building Understanding through Research

Increase our role as a crossroads for research and practice

The Jones Center was founded with the intention of maintaining a world class research, conservation, and education center within a working landscape that includes representative native ecosystems. Our current credibility, relevance, and impact as a trusted source of science-based knowledge is due to our history of rigorous, replicated, published research. We will increase our prominence as a world class research center by engaging in new partnerships and bringing expertise into the Jones Center, while continuing to emphasize publications and other products for disseminating scientifically robust research. This will include publication of our research findings within high quality peer-reviewed literature, while striving to increase the impact of our science on a more diverse audience. Our results will be translated into language and formats accessible to managers, landowners, policy makers, and fellow scientists. This will reduce the time required to move research results into the realm of management and policy while simultaneously increasing access to our body of work.

Objectives

Expand our research and relationships beyond traditional disciplinary boundaries

Increase our focus on developing the next generation of natural resource scientists and leaders

Activities

Identify and prioritize new partners and better explore our shared interests

Explore new areas of research and skillsets with existing personnel

Continue to utilize graduate student co-advisement as a mechanism for developing, sustaining, and expanding research partnerships

Continue the Jones Center graduate student cosponsorship program and explore mechanisms for increasing the number of graduate students involved with Jones Center projects and enhancing their graduate student experience

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Objectives

Maximize the depth, breadth, credibility, and impact of our research

Activities

The impact of the information we share in our education and outreach programs is directly related to our credibility as a research organization. Research depth, breadth, and overall credibility can be measured in a number of ways including:

- Citations and impact factors of our research
- Number and value of external grants and contracts, and other leveraged funding through cooperative agreements
- Number and impact of education events (both solicited and offered) and requested consultations from natural resource managers and policy makers
- Going forward, we must also use additional communications mechanisms and assessment tools that have evolved since the Jones Center's founding. These new metrics may include measures of website visits and social media.
- To achieve this objective, we will:
 - Conduct an analysis to describe our existing and potential ability to conduct the research most needed by us and our stakeholders; Identify gaps in capacity
 - > Conduct a formal research prioritization process
 - Which past projects will be continued, paused, and terminated
 - Which current projects will remain, be modified, or completed
 - Which future projects will be initiated
 - Establish timelines for resulting transitions

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Objectives

Maximize the depth, breadth, credibility, and impact of our research (cont.)

Activities

- > Describe our current research integration
 - Describe our current structure and communicate it better to our stakeholders; Highlight complementary/integrated research efforts
 - Reorganize work plans for current work and describe budget impacts
 - Describe plans to be more intentional about demonstration and extension of our research efforts
- > Revisit the structure of our research
 - Describe our desired future state and structure to address new needs; Bring in outside thinking, engage with external audiences
 - Quantify impacts on resources (financial, human, land, equipment, and facilities)
- Develop and evaluate indices for measuring Jones
 Center impact and initiate a mechanism for tracking impact over time
 - Quantify Center-level indices capable of measuring overall, as well as year-to-year, impacts
 - Establish goals for future values of these indices

Ensure that our research efforts address relevant natural resource questions or anticipated future needs for research Actively engage practitioners in discussions regarding their information needs

Build and use more diverse and collaborative teams



Goal

Demonstrating Knowledge through Conservation

Ensure that all who come in contact with the Jones Center become inspired, informed advocates for our conservation ethic and practice

When the Jones Center began we hired local practitioners, steeped in knowledge of traditional land management practices developed in the pinelands of southwestern Georgia and north Florida, to oversee the stewardship of Ichauway's natural resources. This was a tradition established by Robert Woodruff and we built upon it to mentor and train subsequent generations of conservation professionals, now providing them with state-of-the-art tools and the experience of managing the land year-in and year-out. Conservation tactics are forged through the day-to-day experiences of our conservation staff, and refined by ongoing dialogue with natural resource scientists. As adherents to an adaptive management philosophy, we track what, where, and when management actions are taken, and are able to adjust practices as results are evaluated over time.

The preservation of Ichauway and other large contiguous properties in the southwest Georgia/North Florida region maintained primarily as hunting preserves was accomplished through the vision of Robert Woodruff and other plantation owners who understood that a conservation ethic was compatible with hunting pursuits. Quail hunting was the reason for applying frequent fire to large tracts of land, yet the frequent prescribed fires led to the development of the sparse pine canopy and open understory that sustain an astonishing diversity of plants and animals. Hunting is still central to the Ichauway conservation ethic: the deer herd is culled each fall through a carefully managed hunting program, the quail hunt tradition continues according to specific terms of use, and game animal populations are monitored with scientific rigor.

The Ichauway conservation ethic, however, encompasses much more than the maintenance of game populations. The broad objective is to maintain – and restore when necessary – a functioning ecosystem with as many of the natural floral and faunal components as possible. This includes management to preserve and enhance a diverse understory plant community and suitable habitat conditions for both non-game and game wildlife species. Practices utilized to implement this conservation ethic, including frequent prescribed fire and conservative timber management practices, are applied in a manner informed by patterns of natural disturbance and to preserve the multiple ecosystem components.



That Ichauway represents the very best example of managed longleaf pine forests is a central belief held by all those with intimate knowledge of the property and its management. This property is a legacy of a conservation ethic articulated and passed down from early conservationists such as Herbert Stoddard and Aldo Leopold. This goal seeks to grow this ethic in others by showcasing the land, its history, and the knowledge gained from classic research methods, adaptive management, and conservation experiences passed down for generations to ignite and nurture the ideas of 'what could be' with regard to the open pine systems of the Southeast and their associated water and wildlife.

Creating inspired advocates demands that we define and continue to refine our conservation practices and communicate them with others. This will require us to:

Objectives

Maintain stewardship of Ichauway's unique features (land, legacy, history, knowledge, and people) to serve as a model of excellence in conservation

Activities

Revise the Natural Resource Management Plan to create an updated and integrated view of the property and its use, and identify new potential for modelling our conservation ethic. The plan will include:

- Background on historical land use affecting the present day vegetation and wildlife communities
- Objectives and practices to sustain a program of frequent prescribed fire
- Development of an active forestry program to demonstrate the compatibility of forest tree harvest and conservation objectives

Identify new opportunities to demonstrate our conservation practices and ethic

Identify threats to our ability to continue the stewardship of Ichauway's resources and take appropriate actions to mitigate risks

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Objectives

Increase the number of employees, students, visitors, and partners that can share our ethic

Activities

Focus our people and practices toward a common vision of excellence in science-based stewardship and conservation legacy

Purposeful integration of new employees and graduate students; Assess needs for orientation, cross training, a baseline of needed information (including education in our historical legacy)

 We will directly engage new employees and students in Ichauway's rich history and novel approach to conservation, land and wildlife management, and forestry. We will update orientation to reflect our refined mission and goals, outline opportunities for cross training (among research, conservation, education and outreach), and define the minimum information disseminated among all employees and students. Outgoing employees and students will receive exit interviews to assess integration.

Define our current capacity to host visitors and deliver the ultimate Ichauway experience; Include defining goals and desired outcomes in hosting our various types of visitors

Share our mission and vision with our external partners, customers, and visitors to embrace, share, and build upon our conservation ethic

Increase our focus on developing the next generation of natural resource managers

Initiate and expand the Ichauway Conservation Fellowship program



Goal

Promoting Sound Management through Education and Outreach

Maximize the impact of our knowledge and conservation ethic on natural resources management

Over the last 25 years, the Jones Center has become one of the region's leading sources of scientific research and technical information on longleaf pine ecosystems as well as water resources. Ichauway is also renowned as one of the finest remaining examples of well-managed longleaf pine. Our research and conservation programs offer a powerful and complementary platform upon which our education and outreach programs are built. The Jones Center seeks to maximize our impact through these programs by prioritizing efforts that influence those in positions to make decisions about natural resource management and conservation.

Objectives

Enhance our reputation as a trusted source of natural resource and conservation knowledge and practices

Activities

Target our internal and external communications for maximum impact

- Develop external communications plan; Determine intended impacts, target audiences, strategic messages, and appropriate delivery mechanisms
 - Develop strategies to incorporate new avenues of information delivery, including social media and digital communications
 - Create publication briefs for important new and existing outputs
 - Continue to develop traditional Jones Center publications such as the existing Stoddard Neel and Deer Management publications
- Develop internal communication plan to improve understanding throughout the organization regarding ongoing work, the history of the property and the Jones Center, and to continue to build the Ichauway community

Objectives

Enhance our reputation as a trusted source of natural resource and conservation knowledge and practices (cont.)

Activities

- Engage stakeholders to assess information needs and inform all Center programs, cultivate stakeholder buy-in, and create open systems for communication and synergy
 - Articulate how we will do the work that stakeholders need and incorporate it into future research, conservation, and education plans

Cultivate future generations of natural resource science professionals through experience and education

- Continue to host university classes from natural resource degree programs to maximize impact on students entering the professional ranks
- Strategically reassess our Maymester programs to leverage this opportunity that is uniquely suited to the Jones Center
- Filter new graduate student recruitment against goals of the strategic plan and priority research areas
- Be intentional about telling our historical legacy story
 - Develop a plan for educational historical displays throughout the Jones Center
 - Develop standards for telling our historical legacy story to first-time visitors
 - > Define broad classes of first-time visitors and determine what historical legacy information should be conveyed to each so that visitors may share a common body of knowledge about the Jones Center

Objectives

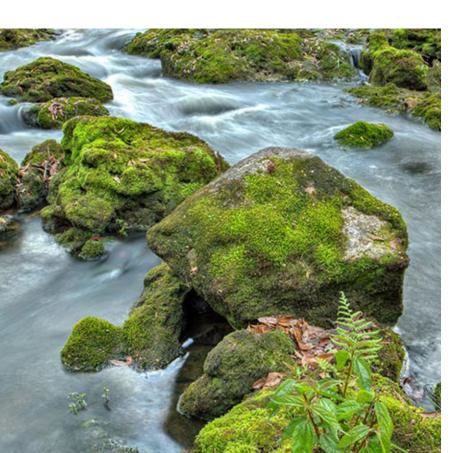
Expand the influence of our natural resource management philosophy

Activities

Increase the acreage and geography of land impacted by our knowledge

- Continue to engage in regional partnerships and look for new opportunities in this arena
- Seek to engage new audiences of natural resources professionals and decision makers that are appropriate for the information that we are generating

Engage with Ichauway alumni to describe impact and grow our outreach



Outlook for the Future

The Jones Center is entering a new era. We have a new director, new challenges to successful research and management, and a new strategic plan to address these new challenges in new ways. The past 27 years have seen the creation of a one-of-a-kind research, demonstration, and education center, a working and learning landscape. Our next phase will concentrate on being known for excellence in natural resource management and learning, on making a greater impact on science and the landscape, and on convening the best minds in research and management to address needs in the southeast and beyond.

We stand poised to further the vision and legacy of those who created this Center from a historic, inspiring place and turned it into the premier institution it is now. We look forward to interacting with our advisors, partners, and trustees to realize our new vision and goals. We feel confident that no one has yet seen just how much the Jones Center at Ichauway can do.

