Registration: https://tinyurl.com/SGNConference

9:00 am **Welcome & Housekeeping SGN Representative.** Karen Lombard, Director of Stewardship and Restoration, The Nature Conservancy, MA.

9:15 a.m. ***Options to Boost Resilience Following Shrub Invasion of Grasslands.*** Jesse Nippert, Professor, Kansas State University, Manhattan, KS.

9:55 a.m. ***Black Pine Management to Restore Sandplain Grasslands: Increasing Resilience of a Globally Rare Habitat.*** Sarah Bois, Director of Research and Conservation, Linda Loring Nature Foundation, Nantucket, MA.

10:10 a.m. ***Whoa, Didn't See That Coming! Unexpected Outcomes from an Inland Pine Barrens Restoration.*** Neil Gifford, Conservation Director, Albany Pine Bush Preserve Commission, Albany, NY.

10:25 a.m. ***Keeping the Sand in the Sandplains: Bare Sand Plays a Key Role in Supporting Biodiversity.*** Jake McCumber, Natural Resources and Training Lands Manager, MA Army National Guard, Camp Edwards, MA.

10:40 a.m. ***Forest Understory Regeneration Following Southern Pine Beetle Suppression Management on Nantucket Island.*** Karen Beattie, Vice President of Science and Stewardship, Nantucket Conservation Foundation Nantucket, MA.

10:45 a.m. **DISCUSSION (10 min) & BREAK (10 min)**

11:05 a.m. ***Distribution, Status, and Flora of Northern Atlantic Coastal Plain Heathland and Grassland*****.** Michael Whittemore Director of Stewardship, Frenchman Bay Conservancy, Hancock, ME.

11:35 a.m. ***Which Source to Choose for a Plant's Name, Regional or Global? Nomenclature and Taxonomy in Sandplain Grasslands and Heathlands.*** Robert Wernerehl, Vice President, New England Botanical Society Glastonbury, CT.

11:50 a.m. ***Current Status and Long-term Trends of Plant Species Richness and Growth Forms in Martha's Vineyard Grasslands.*** Patrick Farrar, Research Assistant, Woodwell Climate Research Center, Falmouth, MA.

12:05 p.m. ***Land Use History of Middle Farms Flats, Fishers Island, N.Y.*** Jack Schnieder, Land Trust Manager and Jessica NeJame, Land Trust Stewardship Coordinator, Henry Ferguson Museum and Land Trust. Fishers Island, NY.

12:20 p.m. ***Protecting Habitat in a Small Inland Sandplain Grassland.*** Fred Moder, Commissioner Conservation Committee, Town of Needham, Needham, MA.

12:25 p.m. ***Soil Chemistry Alterations in Grasslands by Native and Non-Native Invasive Species.*** Kevin Ormerod, Owner, Bluestem Meadows RI, East Providence, RI.

12:30 p.m. **Miscanthus** Richard Couse, Natural Neighbors Program Director Biodiversity Works,Vineyard Haven, MA.

12:35 p.m. **DISCUSSION (10 min) & LUNCH (30 min)**

1:15 p.m. ***Just Scraping the Surface: Grassland Management at Fort Indiantown Gap (and Regal Fritillary Butterfly Boot Camp)*****.** Virginia Tilden, Department of Military and Veterans Affairs at Fort Indiantown Gap, Annville, PA.

1:30 p.m. **System-based Management Benefits Frosted Elfin in a Fire Managed Pitch Pine Scrub Oak Barren.** Alexandria Soldo, Field Ecologist and Entomologist, Albany Pine Bush, Albany, NY.

1:45 p.m. ***Fire on the Ground: Utilizing Prescribed Burns in a Suburban Landscape*****.** Heather Coste, Director of Ecological Sustainability, Sisters of St. Joseph, Brentwood, NY.

2:00 p.m. ***Examining the Effects of Fire Frequency on Plant Community Structure and Tick Population Dynamics in North Atlantic Coastal Ecosystems.*** Sam Gilvarg, PHD Candidate. SUNY College of Environmental Science and Forestry. Syracuse, NY.

2:15 p.m. **DISCUSSION (10 min) & BREAK (10 min)**

2:35 p.m. ***Grasslands as Key Facets of Cranberry Bog Restorations: Windswept Bog Nantucket, MA.*** Kelly Omand, Plant Research Ecologist & Botanist, Nantucket Conservation Foundation, Nantucket, MA.

2:50 p.m. ***Early Progress in the Creation of Sandplain Grassland within the Mattapoisett Bogs Cranberry Bog Restoration Project.*** Chris Neill, Senior Scientist, Woodwell Climate Research Center, Falmouth, MA.

3:05 p.m. ***Comparison Point Intercepts Versus Quadrats for Quantifying Grassland-like Vegetation.*** Francesca LoPresti, Research Assistant, ACES Fellow, Woodwell Climate Research Center, Falmouth, MA.

3:20 p.m. ***Living Observatory's Efforts to Create a Community of People Working on Bog Restoration, and a Clearinghouse for Bog Restoration Data.*** Adrian Wiegman, Learning Coordinator, Living Observatory, Plymouth, MA.

3:35 p.m. ***North Atlantic Fire Science Exchange (NAFSE) - Helping Connect Fire Science to Land Management in the North Atlantic.*** Polly Weigand, NE Fire Projects Manager, Forest Stewards Guild & North Atlantic Fire Science Exchange, Hampton Bays, NY.

3:45 p.m. **DISCUSSION and CLOSING REMARKS**

4:00 p.m. **Program Close**

This program is hosted by North Atlantic Fire Science Exchange and coordinated by the Sandplain Grassland Network Steering Committee.

Many thanks and much appreciation is extended to the following speakers, who through their shared time, expertise, knowledge and passion, help us all continue to protect biodiversity within the Sandplain grasslands of the Atlantic Coastal Plain.

Speaker Abstracts:

Jesse Nippert, Professor, Kansas State University, Manhattan, KS. nippert@ksu.edu - ***Options to Boost Resilience Following Shrub Invasion of Grasslands.*** For the past half century, land managers, conservationists, and ecologists have documented the expansion of woody plants into grasslands and worked to identify solutions to this problem. While some of these strategies have had success, most large landscapes continue to transition from grassland to shrubland or woodland. Natural areas managers need additional tools and strategies beyond a 'resist at all costs' approach to woody encroachment. This session will provide information illustrating the drivers and consequences of this phenomenon followed by potential approaches to maintain biodiversity, range production, and other key ecological services.

Sarah Bois, Director of Research and Conservation, Linda Loring Nature Foundation, Nantucket, MA. stbois@llnf.org - ***Black Pine Management to Restore Sandplain Grasslands; Increasing Resilience of a Globally Rare Habitat***. The Linda Loring Nature Foundation (Nantucket, MA) has been managing non-native invasive Japanese Black Pine (Pinus thunbergii) on their 275-acre property since 2018. Removal of these trees serves to reduce non-native species cover, fire hazards, and threats from southern pine beetles. However, the regeneration of the sandplain grassland and coastal heathland plant communities has been the real success story. This talk highlights management methods, data collection and results, and rare species recovery over 7 years of restoration and management.

Neil Gifford, Conservation Director, Albany Pine Bush Preserve Commission, Albany, NY. ngifford@albanypinebush.org - *Whoa, Didn't See That Coming! Unexpected Outcomes from an Inland Pine Barrens Restoration.* The Albany Pine Bush Preserve Commission has been working to restore a viable inland pitch pine-scrub oak barrens for more than 100 rare species since 1991. There have been many surprises in the last 35 years. This presentation will provide an overview of preserve management and some of the unexpected things we've discovered along the way.

Jake McCumber, Natural Resources and Training Lands Manager, MA Army National Guard, Camp Edwards, MA. Jacob.McCumber@mass.gov - *Keeping the Sand in the Sandplains: Bare Sand Plays a Key Role in Supporting Biodiversity.* While sand is in the name of the natural communities it can be difficult to appreciate the importance of bare, sandy openings in the structural diversity of grassland and heathland habitats. Historically, megafauna and other sources of disturbance would have provided a variety of sandy openings including blowouts, wallows, and linear trails. While we plan for restoration and maintenance of our sandplains today, we should remember to incorporate similar diversity of bare openings rather than seek total vegetative cover. This is a critical element of biodiversity for the grasslands supporting rare and endemic plants and a remarkable diversity of insects. Like all things with grasslands, maintaining openings can take a lot of attention and effort, but if you keep the sand obvious in the sandplains the biodiversity results will impress you.

Karen Beattie, Vice President of Science and Stewardship, Nantucket Conservation Foundation, Nantucket, MA. kbeattie@nantucketconservation.org - *Forest Understory Regeneration Following Southern Pine Beetle Suppression Management on Nantucket Island*. In July 2023, staff from the Nantucket Conservation Foundation (NCF) Department of Ecological Research, Restoration and Stewardship detected Nantucket's first infestation of southern pine beetle (*Dendroctonus frontalis*) on NCF-owned property. Suppression efforts within the ~19-acre pitch pine stand resulted in ~270 trees being felled, scored, chipped, and removed between September 2023 and March 2024. Photo monitoring of the site over time and preliminary species composition of vegetation regenerating in the former forest understory will be presented.

Michael Whittemore Director of Stewardship, Frenchman Bay Conservancy, Hancock, ME. mike.whittemore@frenchmanbay.org - ***Distribution, Status, and Flora of Northern Atlantic Coastal Plain Heathland and Grassland.*** Despite the significant contribution of Northern Atlantic Coastal Plain Heathlands and Grasslands (NACPHG) to regional biodiversity, a map of the habitat's extent and a comprehensive assessment of the vascular flora and rare species have not been assembled. We created a map and flora for NACPHGs using maps dating from 1996 and floras from 1972 by gathering information from landowners, managers, scientific studies, and records from state Natural Heritage Programs (NHPs). Floras were gathered from 64 surveyed sites that totaled 1,865 ha, or 15% of all known habitat. Grasslands and heathlands covered 12,254 ha from NY to MA. NACPHGs held a high diversity of rare and uncommon species despite having a relatively small extent composed of small, isolated patches. A total of 627 vascular plant species were documented on surveyed sites comprising 307 genera and 86 families, including 73 state-listed species. A total of 91 rare species were recorded within NACPHGs with high numbers of rare species in NY and MA compared with other sensitive (S1-S3) habitats. Most rare species had southern distributions along the Atlantic Coastal Plain and Piedmont. A range-wide habitat assessment that combines checklists, NHP data, and localized maps, is an effective way to map and understand biological hotspots. This work justifies managing NACPHGs as biodiversity hotspots and could provide a basis for a regional conservation strategy, a more fine-scale plant community classification, and scalable species lists for restoration. Further work to understand the origin of the diverse NACPHG flora within pre-European contact landscapes is also warranted.*(Additional Authors - Christopher Neill, Polly Weigand, Robert Wernerehl, Sarah Bois, Gretel Clark, Wendy Culbert, Peter Dunwiddie, Rachael Freeman, Kristen Geagan, Russell Hopping, Marilyn Jordan, Elizabeth Loucks, Julie Lundgren, Kelly Omand, William A. Patterson III, Pamela Polloni, Julie Russell, Stephen Smith, Bruce Sorrie, Steve Young)***.**

Robert Wernerehl, Vice President, New England Botanical Society, Glastonbury, CT. wernerehl@gmail.com **-** ***Which Source to Choose for a Plant's Name, Regional or Global? Nomenclature and Taxonomy in Sandplain Grasslands and Heathlands.*** Because our new research paper focused on a regional ecosystem, we relied on taxonomic references from the two states (NY and MA) in which all study sites were located: the Catalogue of the Vascular Plants of New York State and its associated website, the New York Flora Atlas, and Flora Novae-Angliae. Those sources did not always agree. Steve Young and I, two former state botanists, established a rule-based approach to rectify differences of taxonomy and nomenclature between these two sources. The two floras reflect regional knowledge of species, represent years of study through fieldwork and review of herbarium specimens, and are much more likely to present choices reflective of local species variation, in contrast to global databases that use an algorithmic approach to determine accepted names and synonyms and often contain errors.

Patrick Farrar, Research Assistant, Woodwell Climate Research Center, Falmouth, MA. pfarrar@woodwellclimate.org - ***Current Status and Long-term Trends of Plant Species Richness and Growth Forms in Martha's Vineyard Grasslands.*** We evaluated the flora of grasslands and shrublands at five TNC-owned properties on Martha's Vineyard in 2005. We also examined change over two decades at two managed sandplain grassland sites with historical surveys. Species richness and the proportions of cool-season and warm-season grasses remained very consistent over time, suggesting that intensive management is working to maintain target ecosystem structure and high plant species richness.

Jack Schnieder, Land Trust Manager & Jessica NeJame, Land Trust Stewardship Coordinator, Henry Ferguson Museum and Land Trust, Fishers Island, NY. jschneider@fergusonmuseum.org **and** Jnejame@fergudonmuseum.org - ***Land Use History of Middle Farms Flats, Fishers Island, N.Y.*** The sequence of land use history from the time of European settlement to the present will be accounted, along with current ecological conditions and management goals and practices of Middle Farms Flats, the forty-acre grassland on Fishers Island, NY.

Fred Moder, Commissioner Conservation Committee, Town of Needham, Needham, MA. fmoder@verizon.net **-** ***Protecting Habitat in a Small Inland Sandplain Grassland.*** A 7 acre grassland adjoining a glacial esker is managed by the Needham Conservation Commission for habitat preservation and passive recreation. If this is sandplain grassland, which ecological assets are most in need of our protection, and what are best management practices?

Kevin Ormerod, Owner, Bluestem Meadows RI, East Providence, RI bsm@bluestemmeadowsri.com **-** ***Chemical and Microbial Alterations in Low-Nutrient, Sandy Habitats by Invasive Plant Encroachment.*** I will be discussing rapid encroachment by native and non-native invasive species and the loss of native grass and forb species; backed by available research.

Richard Couse, Natural Neighbors Program Director, Biodiversity Works, Vineyard Haven, MA. rcouse@biodiversityworksmv.org**-** ***Removing Miscanthus sinensis from the Market and Regional Landscapes through Coordinated Prevention, Collaborative Compliance and Economic Fairness.*** *Miscanthus sinensis* a widely used ornamental bunch grass, has recently been designated as an invasive species, prohibited for sale in Massachusetts due to its aggressive growth and capacity to outcompete native vegetation. On Martha's Vineyard, continued commercial availability and residential planting pose risks to native plant communities, coastal habitats, and climate-resilient landscapes.

This talk highlights a coordinated, preventative approach to removing *Miscanthus sinensis* from commercial circulation on Martha's Vineyard while supporting local businesses and engaging the broader community. Outreach efforts focus on nurseries, landscapers, and plant vendors to identify remaining inventory and facilitate its removal from sale. Rather than relying solely on enforcement, the approach emphasizes collaboration, compliance, and economic fairness to ensure rapid and effective cessation of planting.

Virginia Tilden, Wildlife Biologist 2, PA Department of Military and Veterans Affairs, Annville, PA. Tvtilden@pa.gov **-** ***Just Scraping the Surface: Grassland Management at Fort Indiantown Gap and Regal Fritillary Butterfly Boot Camp.*** Fort Indiantown Gap (FIG) is home to a variety of high-quality ecosystems, including one of the best representations of native warm-season grasslands in the Mid-Atlantic region. While not sandplains, the habitats overlap in conservation techniques and species composition. This presentation will discuss how military training and land management have supported rare flora and fauna found at FIG, including the proposed endangered eastern regal fritillary butterfly (*Argynnis idalia idalia*). While this subspecies has certain habitat requirements, the management is largely ecosystem based and benefits a variety of other grassland species. The eastern regal is currently only found at FIG, though sites with large scale grasslands and complimentary long-term habitat goals are being explored for potential reintroduction. (See provided "Eastern regal fritillary butterfly reintroduction: site guidelines" Document - Additional Authors - (DMVA) Erika McKinney, Kayli Barben, Mark Swartz, Matthew Banks, Nicholas Hoffman, Tim Becker; (ZooAmerica) Ann Holzman).

Alexandria Soldo, Field Ecologist and Entomologist, N. Gifford, S. Campbell and A. Stupik Albany Pine Bush, Albany, NY. asoldo@albanypinebush.org **-** ***System-based Management Benefits Frosted Elfin in a Fire Managed Pitch Pine Scrub Oak Barren.*** The frosted elfin (*Callophrys irus)* is threatened in New York and occupies fire-adapted pitch pine–scrub oak barrens, including the Albany Pine Bush Preserve (APBP), where long-term management for the endangered Karner blue (*Plebejus samuelis*) has restored fire regimes and ecosystem health. In 2025, distance sampling and emergence modeling estimated 4,827 adult frosted elfins within a 75-acre survey area, mostly at frequently burned sites, indicating that systems-based management with prescribed fire is benefiting frosted elfin and will inform expanded surveys and future conservation planning.

Heather Coste, Director of Ecological Sustainability, Sisters of St. Joseph, Brentwood, NY. coste@csjbrentwood.org**-** ***Fire on the Ground: Utilizing Prescribed Burns in a Suburban Landscape.*** The Sisters of St. Joseph operate a 200-acre campus with an 8-acre meadow in the middle of a densely populated suburban area of Brentwood, NY. Managing this meadow using prescribed fire, the Sisters have a unique challenge juggling their historically under-served community needs with the ecological requirements for appropriate fire application and effective outcomes. We will discuss the challenges and outcomes of the specific management needs, including community engagement, invasive species management, and long-term monitoring of the area.

Sam Gilvarg, PHD Candidate, SUNY College of Environmental Science and Forestry, Syracuse, NY. sgilvarg@esf.edu **-** ***Examining the Effects of Fire Frequency on Plant Community Structure and Tick Population Dynamics in North Atlantic Coastal Ecosystems.*** Many human communities that reside among Sandplain Grasslands face substantial rates of morbidity and mortality from tickborne illness. In this presentation, we will discuss how the loss of grasslands through succession – e.g., conversion to more densely shrubby or wooded systems – could promote tick survival by enhancing tick habitat. We will also discuss how fire management may be a way to moderate the size of tick populations by propagating environmental conditions that are not conducive to tick survival. To that effect, we will briefly consider preliminary results on tick population response to fire management in Northeast Pitch Pine Barrens. Finally, we will discuss how such potential tick-moderating effects could be leveraged to promote the management of disturbance- dependent ecosystems, like Sandplain Grasslands, by increasing public support for prescribed fire.

Kelly Omand, Plant Research Ecologist & Botanist, Nantucket Conservation Foundation, Nantucket, MA. komand@nantucketconservation.org **-** ***Grasslands as Key Facets of Cranberry Bog Restorations: Windswept Bog Nantucket, MA.*** The Windswept Cranberry Bog restoration was a two-phased project completed in spring of 2025 on the island of Nantucket, MA, by the Nantucket Conservation Foundation in cooperation with MA DER and MA NHESP Programs. Goals of the restoration were to transition a decommissioned cranberry bog complex to a functional wetland, enhancing harbor water quality while maintaining habitat value, protecting on-site rare plant species and wildlife, and retaining public access trails. In the design process, sandplain grassland, mesic native grassland, and wet meadows were prioritized along with hydrologic connectivity and diverse wetland communities. To accommodate the deposition areas necessitated by reshaping the landscape, we completed extensive rare species mapping to avoid sensitive areas, adjusting contouring and providing sandy substrates to tie into existing sandplain grassland core areas. To enhance biodiversity, we complemented areas left to spontaneously regenerate from the seed bank with plantings of native species grown in our nursery from locally collected seed stock. Over the two phases of active restoration, we have observed strong recruitment from the seed bank despite drought. Plantings are establishing well in key areas, with desirable open sandy expanses suitable for many disturbance obligate species.

Chris Neill, Senior Scientist, Woodwell Climate Research Center, Falmouth, MA. cneill@woodwellclimate.org - ***Early Progress in the Creation of Sandplain Grassland within the Mattapoisett Bogs Cranberry Bog Restoration Project***. Sandplain grassland creation was designed into the Mattapoisett Bogs cranberry restoration project. We established 20 permanent vegetation monitoring plots within the planned grassland that we surveyed before and for two years after restoration. Post-restoration sandplain grassland vegetation was species rich, dominated by characteristic sandplain grasses, and had small numbers of non-native species.

Francesca LoPresti, Research Assistant, ACES Fellow, Woodwell Climate Research Center, Falmouth, MA. flopresti@woodwellclimate.org - ***Comparison Point Intercepts Versus Quadrats for Quantifying Grassland-like Vegetation.*** Quadrats and point-intercepts are two common methods for surveying the structure and plant species richness in herbaceous plant communities like sandplain grasslands. We compared point intercepts and quadrats, and 3 x 3 m compared with 1 x 1 m quadrats along a series of transects before and after wetland restoration at the Windswept

cranberry bog on Nantucket. One to five quadrats of 3 x 3 m along 50 m transects captured higher species richness compared with point intercepts along the same transects. Point intercepts tended to estimate higher cover of the most abundant species compared with quadrats.

Adrian Wiegman, Learning Coordinator, Living Observatory, Plymouth, MA. adrian@livingobservatory.org ***- Living Observatory's Efforts to Create a Community of People Working on Bog Restoration, and a Clearinghouse for Bog Restoration Data.*** Ecological restoration projects offer valuable learning opportunities. However, isolated project data, time lags between design, construction, and ecological responses, and separation among data, context, and project teams (e.g., ecologists, engineers, and contractors) can inhibit learning. Living Observatory (LO) supports learning about cranberry bog restoration by hosting a community platform, developed by Brian Mayton, for sharing information on projects. This presentation will illustrate how the LO web platform has evolved with the organization to connect people, projects, and data to enable crucial cross-site learning, establish consistent data structure, and support genuine adaptive management."

Polly Weigand, NE Fire Projects Manager, Forest Stewards Guild & North Atlantic Fire Science Exchange, Hampton Bays, NY. Polly@Forestguild.org ***- North Atlantic Fire Science Exchange (NAFSE) - Helping Connect Fire Science to Land Management in the North Atlantic.*** Advancing successful on the ground management within fire dependent and prone ecosystems requires access to fire science. Learn how the Joint Fire Science Exchange Program and NAFSE, one of its 16 regional exchange networks, help facilitate the exchange of this critical wildland fire science and management expertise through collaboration, communication and regional engagement. Showcased will be the upcoming programs, events, and ways in which you can connect and participate in these regional and national fire science initiatives.