

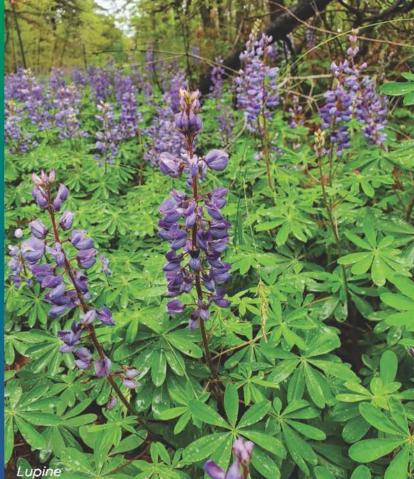


# A GLOBALLY RARE ECOSYSTEM

# **Our Mission**

To manage land use within the **Central Pine Barrens to protect** vital groundwater and surface water and the region's vast and significant natural, agricultural, historical, cultural and recreational resources for current and future Long Island residents.





# ABOUT THE CENTRAL PINE BARRENS

- Established via New York State approval in 1993 of the Long Island Pine Barrens Protection Act
- Act set goals protecting groundwater and preserving the region's vast and significant ecological resources
- Act created a five-member Central Pine Barrens Joint Planning & Policy Commission with members representing New York State, Suffolk County and the Towns of Brookhaven, Riverhead and Southampton
- Act also created and mandated the implementation by the commission of the Central Pine Barrens
  Comprehensive Land Use Plan, which guides management of land use in the region
- · Commission meets monthly with day-to-day operations managed by a staff of professionals



# MESSAGE FROM THE EXECUTIVE DIRECTOR

# Measuring Progress at a Significant Milestone



It seems like just yesterday that a group of dedicated environmentalists, government officials, business leaders and regular citizens concerned about the accelerating pace of development in a globally rare ecosystem on eastern Long Island banded together to protect what is now a 106,000-acre region.

But, Incredibly, 2023 marked 30 years since the Long Island Pine Barrens Protection Act became law and comprehensive measures designed to protect the region's vast ecological resources went into effect. And since that time, members of the Central Pine Barrens Commission, elected officials, developers and others have worked closely together on development proposals to make sure that anything approved by the commission met the act's strict criteria.

As a result, in 2023, the region essentially created in 1993 stands as a testament to cooperation between those with different interests, a lasting tribute to what can be accomplished when people work together toward a common goal.

The anniversary of the act and many other aspects of our work are covered in this report. I hope you take the time to review it, and I hope you take the time to explore all the wonderful aspects of the Central Pine Barrens region.

Please do not hesitate to contact us if we can answer any questions for you about the commission or about the Central Pine Barrens.

**Judith Jakobsen** 

Executive Director, Central Pine Barrens Joint Planning & Policy Commission



# FROM THE FOREST: A BIG NEWS YEAR FOR THE CENTRAL PINE BARRENS COMMISSION

# COMMISSION APPROVES AMENDMENTS TO COMPREHENSIVE LAND USE PLAN

The Central Pine Barrens Commission in 2023 adopted amendments to the Comprehensive Land Use Plan that guides land use in the region, capping a process that began in 2015 and will continue to advance the goal of encouraging appropriate development in the Central Pine Barrens while also protecting its environmental resources.

The amendments, approved in April of 2023, will go into effect in April of 2024. Though the majority of the amendments are ministerial, others will have a major impact on land use within the region.

Below are the most notable amendments:

- Additional definitions and clarifications for projects that achieve the threshold for Development of Regional Significance (DRS) have been added to the land use plan, including an amendment that defines water table exposure and requires commission review of projects that expose groundwater and therefore may have potential adverse impacts on groundwater resources:
- Another DRS amendment sets a 400,000 square foot area threshold for such projects and adds a "mixed use" DRS definition to address projects that involve two or more different land uses, such as residential and commercial, on the same site;
- Amendments to the plan clarify ambiguity in vegetation clearing limits and open space standards, helping to better protect species, wildlife, wetlands and other cultural and natural features, and requiring open space to be restored at a site if it had been cleared or developed, absent a hardship waiver;
- Amendments concerning building design and structure height standards will serve to better protect birds and a new dark skies protection standard will protect fauna potentially impacted by night lighting;
- Various amendments to the Pine Barrens Credit
  Program will bolster the ability of the program to
  meet the goal of the land use plan and Long Island
  Pine Barrens Protection Act to transfer appropriate
  development from the Core Preservation Area to
  the Compatible Growth Area and elsewhere.

"In developing these amendments, the commission expended significant time and effort to examine all aspects of the Comprehensive Land Use Plan and its implementation throughout the years," said Central Pine Barrens Commission Manager of Policy and Planning Julie Hargrave. "The result of this rigorous process is a land use plan that is better suited to guide development and preservation in the spectacular Central Pine Barrens region."

# CENTRAL PINE BARRENS COMMISSION CELEBRATES HUGE MILESTONE

The year 2023 brought an important milestone for the Central Pine Barrens region: the 30th anniversary of the Long Island Pine Barrens Protection Act that provided a roadmap for the preservation of the region's most ecologically sensitive lands and waterways as well as a guide to reasonable development.

Since the act also created the Central Pine Barrens Commission, commission staff, to commemorate the anniversary,



The contributer created a videa to bener the 50th antiversity of the Long Island Pine Barrans Protection Act

created a 20-minute video tracing the development of the act and the efforts of those who helped create it. The video was shown at the commission's annual Cooperators meeting in June.

"Now more than ever, it is essential that we make sure the public is fully aware of the significance of the Central Pine Barrens, and what better way to do that than to create a video tribute to those whose work led to its protection," said the commission's Executive Director Judy Jakobsen.

# COMMISSION DEVELOPS ROBUST PRESCRIBED FIRE PROGRAM

The Central Pine Barrens Commission has developed a robustly equipped and staffed prescribed fire program to increase the regional capacity to support and conduct fire operations within the forests of the Central Pine Barrens.

Commission staff and partnering agencies built the framework of the program, including the development of burn plans for thousands of acres of forest, purchasing and outfitting equipment and vehicles, hiring wildland fire professionals and educating the public about the importance of the work. A substantial number of prescribed burns have already been held under the program.

The Central Pine Barrens is a globally rare fire dependent ecosystem that has experienced a decline in forest health in recent years as well as a high wildfire risk due to a lack of fire disturbance, among other factors. The recent arrival of the southern pine beetle and resulting decimation of pitch pines has exacerbated the problem, and massive wildfires such as the 1995 Sunrise Fire and 2012's Crescent Bow fire are striking indictors of the increase in regional wildfire risk.

"The use of prescribed fire is vital to mitigate wildfire risk and to protect public safety while addressing forest health issues with the Central Pine Barrens, and I'm extremely proud of the work performed by our commission staff in developing the prescribed fire program to address this urgent need," said Central Pine Barrens Commission Executive Director Judy Jakobsen.



The prescribed fire program's new logo

# STUDY OF RARE (AND NOT SO RARE) MAMMALS UNDERWAY

The Central Pine Barrens Commission is contributing to a coordinated effort to chart the distribution of various rare and common species of terrestrial and semi-aquatic mammals on Long Island.

The program, lead by Seatuck Environmental Association and the New York Natural Heritage Program, collects data on the mammals via game cameras and live trapping of smaller species, such as shrews, mice and voles in order to document occurrences and distribution of these animals.

Species commonly identified through

monitoring efforts include white tailed deer. opossum, raccoon. red fox. groundhog, rabbit. muskrat. flying squirrel and otter. However, the overarching goal of the study is to detect



Mammals being charted by the commission include the white tailed deer, raccoon, red fox, otter and gray fox

occurrences of rare species such as gray fox, long tailed weasel, striped skunk, beaver and eastern coyote.

The data will be used to help inform management within the Central Pine Barrens and to create a New York Mammal Survey. The findings are also expected to be used by wildlife managers to guide future hunting and trapping regulations for species that are abundant and well distributed in New York State while providing protections to those that are rare on Long Island.

No such study has been conducted since the early 1960s when Paul Connor, a scientist with the New York State Museum and Science Service, conducted a similar study.

The public is welcomed and encouraged to lend a hand—or an eye—to the effort. Sightings of terrestrial mammals can be reported by uploading pictures via iNaturalist at https://www.inaturalist.org/projects/long-island-mammal-survey. Or, if you've seen a rare species such as a gray fox, long tailed weasel, striped skunk, beaver or eastern coyote, please email ecologist@pb.state.ny.us to help the commission focus its monitoring for these animals.

# COMMISSION ASSISTS IN STUDY OF UNIQUE ATLANTIC WHITE CEDAR POPULATION

The culturally and ecologically iconic Atlantic white cedar (Chamaecyparis thyoides) can grow to 70 feet tall at maturity. So what's with the unique population within Sears Bellows County Park that is short in stature?

The Central Pine Barrens Commission, with the assistance of partner agencies and intrepid local students, is seeking to find out.

Scientists and naturalists have been perplexed by the phenomenon and have hypothesized as to

whether genetics or environmental conditions have led to the small-statured population of the trees. And so with the assistance of Dr. Sharon Pepenella (formerly of Cold Spring Harbor Laboratory, now with Brookhaven National Laboratory) and John



An Atlantic white cedar at Sears Bellows County Park

Turner of the Town of Brookhaven and Seatuck Environmental Association, students from Massapequa High School conducted a study to determine the driver of short-statured Atlantic white cedars within the park.

With the assistance of the commission, Turner and Pepenella, the students studied the tree's natural history and threats while conducting field data collection, among other aspects of the study. The students developed a final report of their findings and will be invited to present at research conferences to discuss their report and help shed light on the interesting phenomenon.

"The students' findings suggest that perhaps this coastal plain pond wetland is in the early stages of succession, having enough organic substrate to support the growth of Atlantic white cedars, but that environmental conditions limit the growth of the tree to its full size," said the commission's Science and Stewardship Manager Polly Weigand. "We're thrilled to have had the opportunity to partner with the students and others to study this rare tree of the coastal plain."

# COMMISSION JOINS OTHER AGENCIES FOR LANDMARK WATER MONITORING PROJECT

Numerous agencies including the Central Pine Barrens Commission have joined the U.S. Geological Survey (USGS) in a landmark project to provide long-term water quality and water quantity monitoring within the Central Pine Barrens, an effort expected to identify potential areas of ecohydrologic concern.

The project was launched by USGS in October of 2017 in partnership with the commission, the Town of Brookhaven, the Suffolk County Water Authority, the Suffolk County Department of Health Services and the New York State Department of Environmental Conservation. A five-year surface and groundwater data collection period wrapped up in September of 2022 after extensive monitoring on the Carmans River, Peconic River and at various other locations throughout the region. The USGS is now in the process of developing an interpretive report to summarize its findings.

"This vital study will ultimately provide natural resource managers, stakeholders and the public with important information about water resource conditions that can be compared to future hydrologic conditions with the Central Pine Barrens," said Central Pine Barrens Commission Executive Director Judy Jakobsen. "This will help immensely in determining whether development or other stressors within the region are negatively impacting the water resources in this globally rare region."

To better understand sources of contamination, the USGS collected water samples from multiple locations on both rivers, twice a year on the Peconic and four times a year on the Carmans. According to the USGS, each sample is analyzed for nutrients, major inorganic constituents and alkalinity. Samples were also taken from certain sites to analyze the potential impact of pesticides and pharmaceutical constituents.

Additionally, both shallow and deep groundwater supply wells have been sampled by the USGS within the Central Pine Barrens. Samples collected from these wells were analyzed for nutrients, major inorganics, alkalinity, pesticides, volatile organic compounds, pharmaceuticals and per- and polyfluoroalkyl substances (PFAS).

In terms of quantity, the USGS and its partner agencies also measure groundwater level elevations in wells within the Central Pine Barrens regularly. Several wells are equipped with water level recorders, which provide data used to document water table fluctuations caused by factors such as precipitation and water usage. These measurements provide information needed for better water management within the region; nearly all water in streams and lakes comes from groundwater, so if the water table is reduced due to drought, pumping or other factors, streams and lakes and their ecosystems can also be adversely impacted.

"We are eagerly looking forward to evaluating the interpretive report and utilizing its findings to protect the water resources of the Central Pine Barrens," Jakobsen said.



A map charting monitoring locations within the Central Pine Barrens



USGS employees collecting sample

# PROTECTING ECOLOGICAL RESOURCES

The Compliance and Enforcement Division coordinates enforcement matters pertaining to Article 57 of New York State Conservation Law, the Long Island Pine Barrens Protection Act. With numerous federal, state and local jurisdictions having oversight responsibilities within the region, the division's role is essential in protecting the ecological resources of the Central Pine Barrens.

- Documented 115 new investigations and incidents involving dumping, encroachments and illegal all-terrain vehicle (ATV) use
- Investigated 89 solid waste complaints resulting in tens of thousands of dollars in fines levied
- Monitored footage from 18 surveillance cameras at various locations throughout the Central Pine Barrens
- Initiated implementation of innovative new camera system to help identify those engaging in illegal dumping
- Provided unmanned aircraft system (UAS) instruction at the New York
   Wildfire and Incident Management Academy and trained various Central
   Pine Barrens Commission staff as UAS pilots and instructors
- Piloted drones to monitor conditions and activities within the Central Pine Barrens, helping to make drones an essential tool in protecting the region
- Interfaced regularly with members of the Law Enforcement Council,
   code enforcement officials, town attorneys and other officials to deter
   encroachment and other illegal activities within the Central Pine Barrens
- Supported details to curb the illegal use of ATVs and other off-road vehicles conducted by the Law Enforcement Council, leading to the impound of 78 ATVs, 37 additional off-road vehicles and the issuance of 295 summonses
- Fully implemented computerized complaint system









# **Educational Outreach** and Communications Division

# **HELPING THE PUBLIC APPRECIATE** AN ECOLOGICAL TREASURE

The Educational Outreach and Communications Division creates. organizes and leads a wide range of public forums and events geared toward helping children and the general public gain a lasting appreciation for the Central Pine Barrens region and how to protect it for current residents and future generations.

- Expanded its scope to include all aspects of internal and external communications engaged in by the Central Pine Barrens Commission
- Coordinated "A Day in the Life" of a local waterway events with school districts and environmental organizations to afford schoolchildren the opportunity to measure physical data of waterways, conduct biological sampling, conduct chemical analyses and document their findings
- Expanded "A Day in the Life" program to reach pre-Covid 19 participation levels, conducting programs at 13 sites with 40 schools and nearly 2,000 schoolchildren
- Conducted full assessment of "A Day in the Life" program with partner organizations to enhance program in time for the 2024 season
- · Educated 100 children at the annual "Barrens to Bay" summer camp, held in conjunction with Wertheim National Wildlife Refuge
- Developed budget and recruited staff for the 2024 "Barrens to Bay" camp
- Produced and directed video celebrating the 30th anniversary of the Long Island Pine Barrens Protection Act aired at the Central Pine Barrens **Commission's annual Cooperators Meeting**
- Coordinated, edited and designed commission's 2023 Annual Report
- Assisted in design of logo for commission's Fire Management Program
- · Wrote tribute certificates for departing members and designated representatives of the commission
- Facilitated multiple media stories focused on the fall 2023 New York Wildfire and Incident Management Academy
- · Presented for civic organizations interested in the results of the 2023 "A Day in the Life" of the Carmans River

# IMPROVING FOREST HEALTH

The Science and Stewardship Division conducts a wide variety of activities designed to improve forest health, increase diversity of Central Pine Barrens-dependent species and enhance the public's awareness of the region's ecology, especially as it relates to ecological restoration and prescribed fire.

- Designed a logo to brand and spread awareness of the Central Pine Barrens Commission's Fire Management program
- Outfitted the commission's Type 6 fire engine, which will serve as an integral component in support of prescribed fire operations
- Developed new burn plans for fuel and habitat management within the Dwarf Pine Barrens and Otis Pike and Rocky Point Pine Barrens State Forests, bringing the total of forested acreage planned for prescribed fire treatment to 7,257 acres
- Created 265 burn piles within the Sarnoff and Rocky Point Pine Barrens
   State forests as part of a preventive thinning initiative that will facilitate future pile burning and therefore reduce fuels and organic matter accumulations
- Partnered with other agencies to conduct 19 prescribed fires and three pile burning operations resulting in the treatment of 319 acres of state grasslands and 37 acres of woodlands
- Provided mutual aid to the New York State Department of Environmental Conservation for the 13-acre Swan Lake Wildfire mop up
- Executed Memorandum of Understanding with the Suffolk County
   Department of Parks, Recreation and Historic Preservation to facilitate
   continued stewardship, ecosystem restoration and prescribed fire
   on county parklands
- Co-wrote published article with staff from other agencies on sandplain grassland management in the northeast in the Journal of Restoration Ecology, helping to bring much needed attention to the loss of such grasslands to succession, invasive species encroachment, climate change, sea level rise and species extirpation
- Continued early detection and rapid response non-native bark and ambrosia beetle monitoring and southern pine beetle lure management studies with the New York State Department of Environmental Conservation and US Forest Service
- Served as presenters, panelists and instructors at numerous national, regional and local wildland fire, natural history and scientific workshops and conferences
- Conducted approximately 10 educational and operational outreach initiatives to increase awareness of the prescribed fire program, Central Pine Barrens ecology and upcoming operations















# Land Use and **Planning Division**

# DILIGENT REVIEW OF **DEVELOPMENT ACTIVITIES**

The Land Use and Planning Division diligently reviews development proposals and applications under the Central Pine Barrens Commission's regulatory jurisdiction pursuant to New York State Environmental Conservation Law Article 57 and the Comprehensive Land Use Plan.

- Successfully completed the environmental review and finalized amendments to the Comprehensive Land Use Plan that were adopted in April
- · Began researching the feasibility of creating a Pine Barrens Interpretive Center to serve as an educational facility and commission office headquarters
- Reviewed and analyzed land use development applications including nine hardship waiver exemptions for development activities in the Core Preservation Area and Compatible Growth Area, developments of regional significance, jurisdictional determinations and other proposals for commission consideration
- Provided comments on approximately 55 referrals on development projects received from the Towns of Southampton, Brookhaven and Riverhead, Suffolk County and New York State, Including residential, commercial, industrial land use-related actions
- Performed site inspections on development projects under review by the commission
- · Coordinated with compliance and enforcement staff on land use incidents and violations
- Assisted with Freedom of Information Law requests concerning land use development projects and activities
- Monitored conformance with decisions made by the commission
- · Completed a five-year water resources study of water quality in the Peconic River and Carmans River while planning for continued research in a contract between the commission and the United States Geological Survey

New York Wildfire and Incident Management Academy

# TRAINING THE HEROES OF TOMORROW

The New York Wildfire and Incident Management Academy (NYWIMA) has for more than two decades provided essential training in wildfire and incident management to thousands of firefighters and emergency response personnel from all over the country and beyond.

In 2023, NYWIMA continued its rebound from the COVID-19 pandemic, welcoming 217 students from as far away as Canada to its fall academy, held at Brookhaven National Laboratory.

## This year's academy featured training in classes including:

- Introduction to Wildland Fire Behavior
- Wildfire Chainsaws
- Portable Pumps and Water Usage
- Firefighter Type 1
- Firing Operations
- Crew Boss
- Engine Boss
- Wildland Fire Origin and Cause Determination
- Off-Highway Vehicle Basic Driving
- Brush Truck Training
- Introduction to Unmanned Aircraft Systems
- Unmanned Aircraft Systems FAA Prep Course













The Long Island Pine Barrens Protection Act specified the need for land use protection mechanisms to protect the Core Preservation Area, including the transfer of development rights that began when the 1995 Comprehensive Land Use Plan was completed and the Pine Barrens Credit Program was created. This program facilitates the transfer of development rights so the most environmentally sensitive lands in the region are preserved, with the property owner able to transfer development potential to land in other locations.

The Comprehensive Land Use Plan created a five-member Clearinghouse Board of Advisors to oversee the Implementation of the credit program.

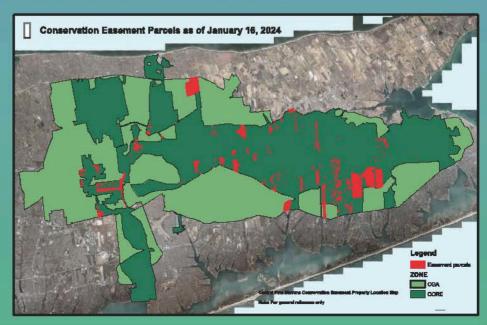
Owners and purchasers of credits transact business in an open market, with all credits and transactions tracked by the clearinghouse from beginning to end.

In the summer of 2023, the Central Pine Barrens Commission conducted a credit auction, resulting in the purchase of 0.65 credits from credit owners. Additional credits are expected to be purchased by the commission after easements are recorded.

Credit auctions facilitate the commission's goal of achieving compact, efficient and orderly development in the Central Pine Barrens.

## In 2023, the Credit Program:

- Issued 35 letters of Interpretation
- Recorded 13 conservation easements and generated 4.94 credits
- · Redeemed 15.33 credits
- Sold 24.31 credits, with an average credit value of \$101,806
- Inspected 50 easement properties
- Protected 9.6 acres via conservation easements



# Central Pine Barrens Joint Planning and Policy Commission

#### **Robert Calarco**

Chairman and New York State Governor's Representative

#### Steven Bellone

Member and County Executive
Designated Representatives: Dorian Dale,
Sarah Lansdale, Andrew Freieng

### **Yvette Agular**

Member and Riverhead Town Supervisor
Designated Representative: Danielle Hurley

#### **Edward P. Romaine**

Member and Brookhaven Town Supervisor Designated Representatives: Emily Pines, Michelle DiBrita

### Jay Schnelderman

Member and Southampton Town Supervisor Designated Representatives: Janice Scherer, Martin Shea

### **Commission Staff**

Judy Jakobsen, Executive Director Julie Hargrave, Manager of Policy and Planning Samantha Acampora, Ecological Field Specialist Angela Brown-Walton, Administrative Assistant Frank Carbone, Chief Enforcement Officer Catherine Drew, Administrative Assistant Alena Lawston, Enforcement Officer Katherine Malangone, Academy Coordinator John Milazzo, Legal Counsel Tim Motz, Educational Outreach and Communications Coordinator Robert Panko, Fire Management Specialst Martin Stelger, Enforcement Officer Christopher Steigerwald, Ecological Field Specialst Jerry Tverdyy, Senior Environmental Analyst Polly Welgand, Science and Stewardship Manager Michael Whittemore, Ecologist





# **COMMISSION STAFF**



The staff of the Central Pine Barrens Commission. From Left: Jerry Tverdyy, Judy Jakobsen, Frank Carbone, Tim Motz, Samantha Acampora, Martin Steiger, Alena Lawston, Chris Steigerwald, Catherine Drew, Michael Whittemore, Angela Brown-Walton, Polly Weigand and Julie Hargrave. (Not pictured are John Milazzo, Robert Panko and Katherine Malangone.)

(The commission also employs a seasonal prescribed fire crew led in 2023 by Fire Management Specialist Brent Woffinden and supported by Singe Resource Bosses Brian Bagozzi and John Leavitt, Squad Boss Taylor Kern and Prescribed Crew Members Ron Bagan and Jessica Mencel.)

