



# 2024 Annual Report

New Jersey Pinelands Commission

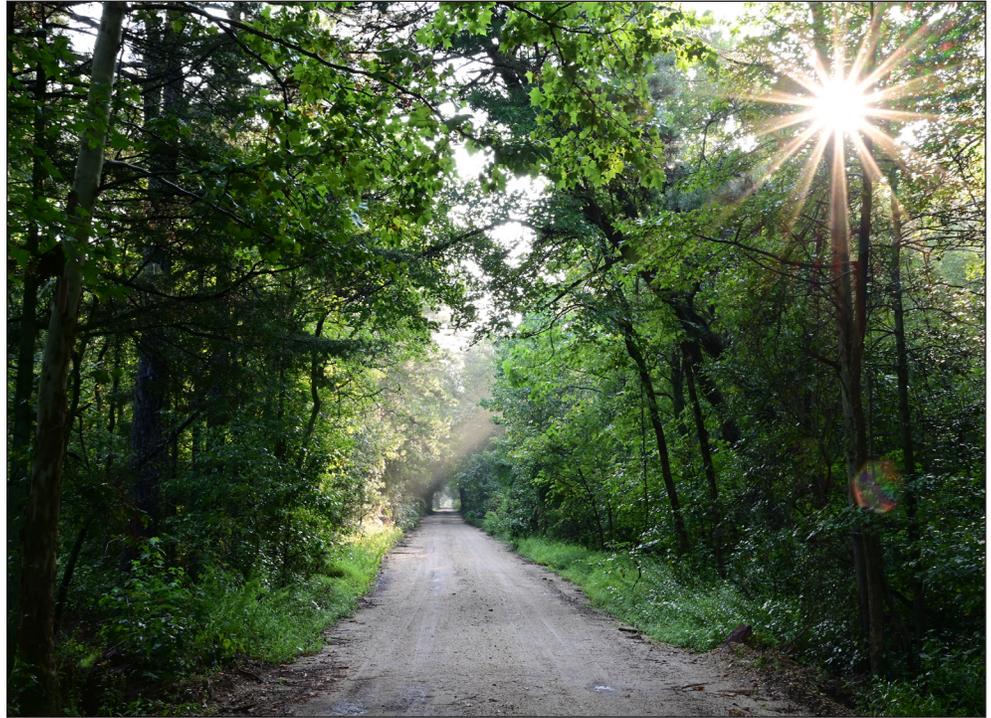


# Protecting the New Jersey Pinelands

The New Jersey Pinelands Commission is an independent state agency whose mission is to preserve, protect, and enhance the natural and cultural resources of the Pinelands National Reserve, and to encourage compatible economic and other human activities consistent with that purpose.

The Commission was created by the passage of the Pinelands Protection Act in 1979.

To accomplish its mission, the Commission implements a comprehensive plan that guides land use, development and natural resource protection programs in the 938,000-acre Pinelands Area of southern New Jersey. The Commission's 15-member board consists of state, county and federal appointees who volunteer their time and expertise. The panel meets monthly and receives guidance from its Executive Director and staff.



**Above:** The state Pinelands Area is a million-acre mosaic of forests, farms, and towns, crisscrossed by streams and teeming with wildlife. It also boasts extraordinary scenic beauty, as shown in this photo of Wharton State Forest, which spans more than 122,000 acres. Photo/Paul Leakan

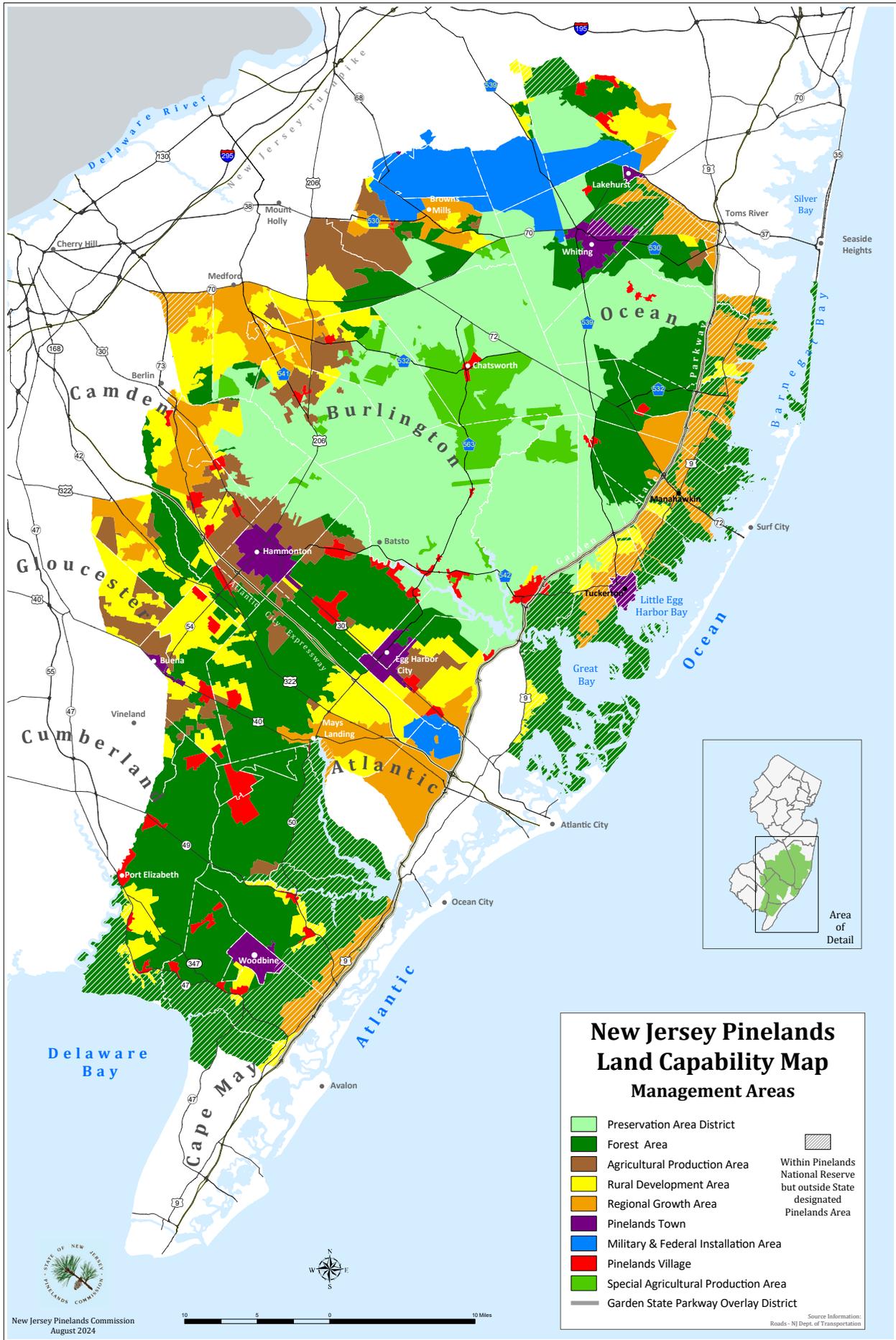
## Commissioners:

Laura E. Matos, Chair  
Alan W. Avery, Jr., Vice Chairman  
Nicholas Asselta  
Deborah Buzby-Cope  
Daniel Christy  
John Holroyd, Jr.  
Jerome H. Irick  
Theresa Lettman  
Mark S. Lohbauer  
Mark Mauriello  
Jonathan Meade  
William Pikolycky  
Jessica Rittler Sanchez  
Doug Wallner

Susan R. Grogan, Executive Director

Pinelands Commission  
P.O. Box 359  
New Lisbon, NJ 08064  
Phone: (609) 894-7300  
Fax: (609) 894-7330  
Website: [www.nj.gov/pinelands](http://www.nj.gov/pinelands)





# Executive Director's Message

The Commission made great strides to advance its mission to preserve, protect, and enhance the resources of the Pinelands in 2024.

We welcomed two new Commissioners, along with several new employees in our Land Use Programs, Regulatory Programs, Science, and Information Systems offices. The Commission also began implementing new rules in 2024 that strengthen protections of the Pinelands ecology, in particular the Kirkwood-Cohansey aquifer, a freshwater reservoir that underlies the Pinelands and contains an estimated 17

trillion gallons of water. We completed a comprehensive review of Pinelands management area boundaries to identify areas designated for growth that are vulnerable to climate change. We executed Memoranda of Agreement with Pemberton Township and Stafford Township, enabling both municipalities to surface existing trails in order to provide accessibility for those with ambulatory challenges. We continued to administer the Pinelands Development Credit Program (PDC), which saw average sales prices of PDCs increase significantly over the prior year. We received and reviewed 186 municipal master plan and ordinance amendments and received 348 new applications for development in 2024. We continued our efforts to permanently preserve land in the Pinelands, with 1,166 acres preserved in the Pinelands Area from July 2023 to June 2024. We held our second annual Land Preservation Summit with our land preservation partners, and we provided an in-depth training session for 70 municipal staff members who are involved with the land development process in the Pinelands. We undertook numerous scientific research projects, including water-level monitoring, frog and toad surveys, the radio-tracking of native snakes and box turtles, and studies on snake fungal disease and adenovirus monitoring. We responded to public inquiries and educated thousands of people about the Pinelands through in-class education programs, the annual spring and summer Pinelands Short Course events, the annual Pinelands-themed World Water Monitoring Challenge, and the Pinelands Speaker Series. We also raised awareness and appreciation of the Pinelands through hundreds of postings and videos on Instagram, X, and YouTube.

We are excited about all that we accomplished in 2024 and look forward to another successful year of safeguarding the Pinelands.



**Above:** Fall foliage reflecting off Atsion Lake in Wharton State Forest in the Pinelands.

Photo/Paul Leakan

Handwritten signature of Susan R. Grogan

Susan R. Grogan  
Executive Director

# Commission Gains Two New Members in 2024

The Pinelands Commission gained two new members on its 15-member board in 2024, including gubernatorial appointees Jessica Rittler Sanchez and Dr. Deborah Buzby-Cope.

Ms. Rittler Sanchez took the oath of office during the Commission's regular meeting on January 12, 2024.

A resident of the Pinelands for nearly two decades, Ms. Rittler Sanchez was appointed as a gubernatorial representative on the Commission in December 2023. She filled the seat that became vacant when Bob Barr resigned as a Commission member in 2019.

Ms. Rittler Sanchez is a regional planner who believes that a healthy environment and healthy economy are inextricably linked. She retired from the Delaware River Basin Commission (DRBC) after two decades in government service, including 16 years in water resource planning and management at the Delaware River Basin Commission and four years with the NJ Office of State Planning. Prior to joining the DRBC, Ms. Rittler Sanchez was an Environmental Projects Coordinator with the New Jersey Office of State Planning, where she was responsible for reviewing a wide array of environmental initiatives and coordinating with appropriate agencies to ensure integration with the State Development and Redevelopment Plan. Included in her purview were wastewater, stormwater, watershed management and water supply planning. She participated in the Brownfields Redevelopment Task Force and New Jersey's Comparative Risk Project and co-authored the original policy that guaranteed protection for the Highlands in the NJ State Plan. Ms. Rittler Sanchez was a Marion Johnson Fellow at Rutgers, where she pursued an interest in the successful joining of science, policy, and planning. She was awarded a Master of City & Regional Planning and a Ph.D.

A lifelong resident of the Pinelands community of Bass River Township, Dr. Buzby-Cope was appointed as a gubernatorial representative on the Commission in December 2024. She filled the seat that became vacant when Davon McCurry resigned from the Commission on January 30, 2023.

Dr. Buzby-Cope served as the Mayor of Bass River Township from May 2008 - May 2024, as the Township's Deputy Mayor from May 2004 – May 2008 and as a Township Commissioner from May 2000 – May 2004. Dr. Buzby-Cope holds a Doctor of Chiropractic from Life University and a Bachelor of Science from the University of the State of New York – Regents College, along with certifications from Rutgers University, the International Association of Veterinarian Practitioners, American Veterinary Chiropractic Association, and education as a Veterinarian Assistant. She has worked as a chiropractor at Buzby Chiropractic since 1995, and she has served on the Pinelands Municipal Council, Tuckerton Seaport Board of Directors, the National Foundation of Women Legislators, the New Jersey League of Municipalities, the New Jersey Conference of Mayors, and the American Veterinarian Chiropractic Association's Board of Directors. Dr. Buzby-Cope also owns and operates a horse farm.



**Commissioner Jessica Rittler Sanchez**



**Commissioner Deborah Buzby-Cope**

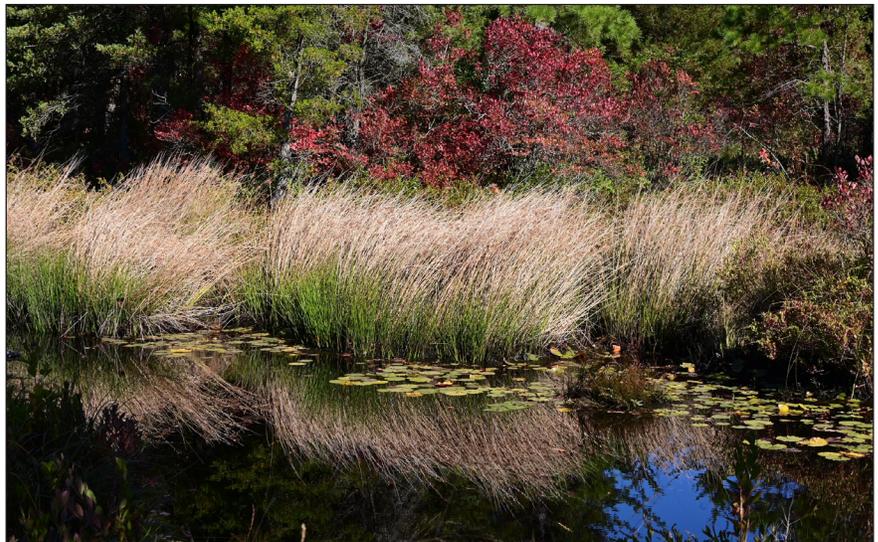
The Commission’s 15-member board consists of seven members who are appointed by the New Jersey Governor, one member appointed by each of the seven Pinelands counties, and one member appointed by the U.S. Secretary of the Interior. The gubernatorial appointees are subject to the review and consent of the New Jersey Senate. Commission members are unpaid volunteers who dedicate countless hours of their time and expertise while serving on the Commission.

## Planning Activities

### Amendments to the Pinelands Comprehensive Management Plan

The Pinelands Commission began implementing new rules in 2024 that strengthen protections of the Kirkwood-Cohansey aquifer, a freshwater reservoir that underlies the Pinelands and contains an estimated 17 trillion gallons of water.

The rules took effect at the end of December 2023 after years of study for purposes of enhancing the protection of the aquifer and the Pinelands ecology as a whole. Another goal of the rules was to ensure sufficient water supply for authorized development in the growth-oriented portions of the Pinelands Area.



**Above:** In 2024, the Commission began implementing rules that strengthen protections of the Kirkwood-Cohansey aquifer and the Pinelands ecology as a whole. Photo/Paul Leakan

The Commission now has clear, quantifiable standards in place to address potential adverse, local, and regional impacts.

### Climate resilience

The Commission’s Climate Committee met three times in 2024, focusing its discussion on the potential impact and applicability of other state agency rulemaking in the Pinelands Area.

In particular, the New Jersey Board of Public Utilities’ dual use solar pilot program, the New Jersey Department of Environmental Protection’s (NJDEP) 2024 Statewide Water Supply Plan and NJDEP’s proposed Resilient Environments and Landscapes (REAL) amendments were considered.

The Committee also completed a comprehensive review of Pinelands management area boundaries to identify areas designated for growth that are vulnerable to climate change. Staff recommendations to address these vulnerabilities through increased protection in the future were also reviewed, including land preservation prioritization and increased wetlands buffer requirements. Finally, Commission staff attended the monthly and senior staff meetings of the Interagency Council on Climate Resilience, and participated as a member of the Vulnerability Assessment work group, including making a presentation on the Commission’s management area boundary assessment project. The Commission also contributed to the Council’s agency accomplishments report and upcoming Extreme Heat Resilience Action Plan.

## Pinelands Commission Agreements Authorize Accessibility Improvements in Pemberton Township and Stafford Township

In 2024, the Commission executed memoranda of agreement (MOA) with Pemberton Township, Burlington County, and Stafford Township, Ocean County, to facilitate surfacing of existing trails on public lands, in the Pinelands Area.

The goal was to provide a stable surface for those with ambulatory challenges and recognize the grant funding that has been provided by other state departments for such projects. The trails are located in wetlands and/or required wetlands buffer areas; therefore, a deviation from the Commission's rules needed to be approved in order for the proposed surfacing (paving) to be permitted.

The [MOA with Pemberton Township](#) enables the Township to improve a portion of the Pemberton Lake Trail in the Pemberton Lake Wildlife Management Area. The [MOA with Stafford Township](#) enables the Township to undertake accessibility improvements on existing trails next to Forecastle Lake. Both MOAs require the municipalities to complete onsite restoration and revegetation projects.



**Above:** In 2024, the Commission approved a Memorandum of Agreement that enables Stafford Township to undertake accessible improvements on the trails next to Forecastle Lake. Photo/Paul Leakan

## Commission Issues Latest Report Charting the Economic Health of Municipalities in the Pinelands

In July 2024, the Commission issued its 2022 Long Term Economic Monitoring Report, which provides economic data and describes key trends in the areas of population, real estate, economic growth, and municipal finance.

The [2022 Report](#) includes data from 2018-2022 applicable to the Pinelands Area and surrounding communities in South Jersey. The report shows that Pinelands municipalities have recovered well from the COVID-19 pandemic, in terms of unemployment and wage rates, and are faring similarly to other parts of New Jersey in several economic indicators. The Commission also issued the [2022 Municipal Fact Book](#), which presents data by municipality and provides a summary of economic conditions in each Pinelands municipality, while placing each municipality in a broader context by displaying average values for the eight South Jersey counties and municipal ranks for a large number of variables.

The report is funded by the National Park Service. The Commission released its first Long Term Economic Monitoring Report in 1997, and the reports include much of the same economic data, so the agency can identify changes or trends over time.

### New Jersey Pinelands Commission Long Term Economic Monitoring Program



### 2018-2022 Report

Laura E. Matos, Chair

Susan R. Grogan, Executive Director

## Pinelands Development Credit Program

The Pinelands Development Credit Program is a regional transfer of development rights program that preserves important agricultural and ecological land. Pinelands Development Credits (PDCs) are allocated by the Commission to landowners in the Preservation, Agricultural Production and Special Agricultural Production Areas, which are the sending areas. PDCs can be purchased by property owners and developers who are interested in developing land in Regional Growth Areas, which serve as the receiving areas. PDCs are most often used for residential development, either to increase permitted density, allow development on an undersized lot or as a required component of a residential subdivision or redevelopment project. Each PDC transfers the right to build four homes and can be bought and sold in ¼ credit increments.

Once PDCs are “severed” from a sending area property, the property is permanently protected by a conservation or agricultural deed restriction and the PDCs allocated to that property can be sold on the private market.

During 2024, 72.12 PDCs were allocated by the Commission to 28 sending area properties. A total of 12 PDCs were severed, protecting a total of 281 acres of land in the Preservation Area District and Agricultural Production Area on properties located in the Town of Hammonton and Franklin, Galloway, Southampton, Tabernacle and Winslow townships.



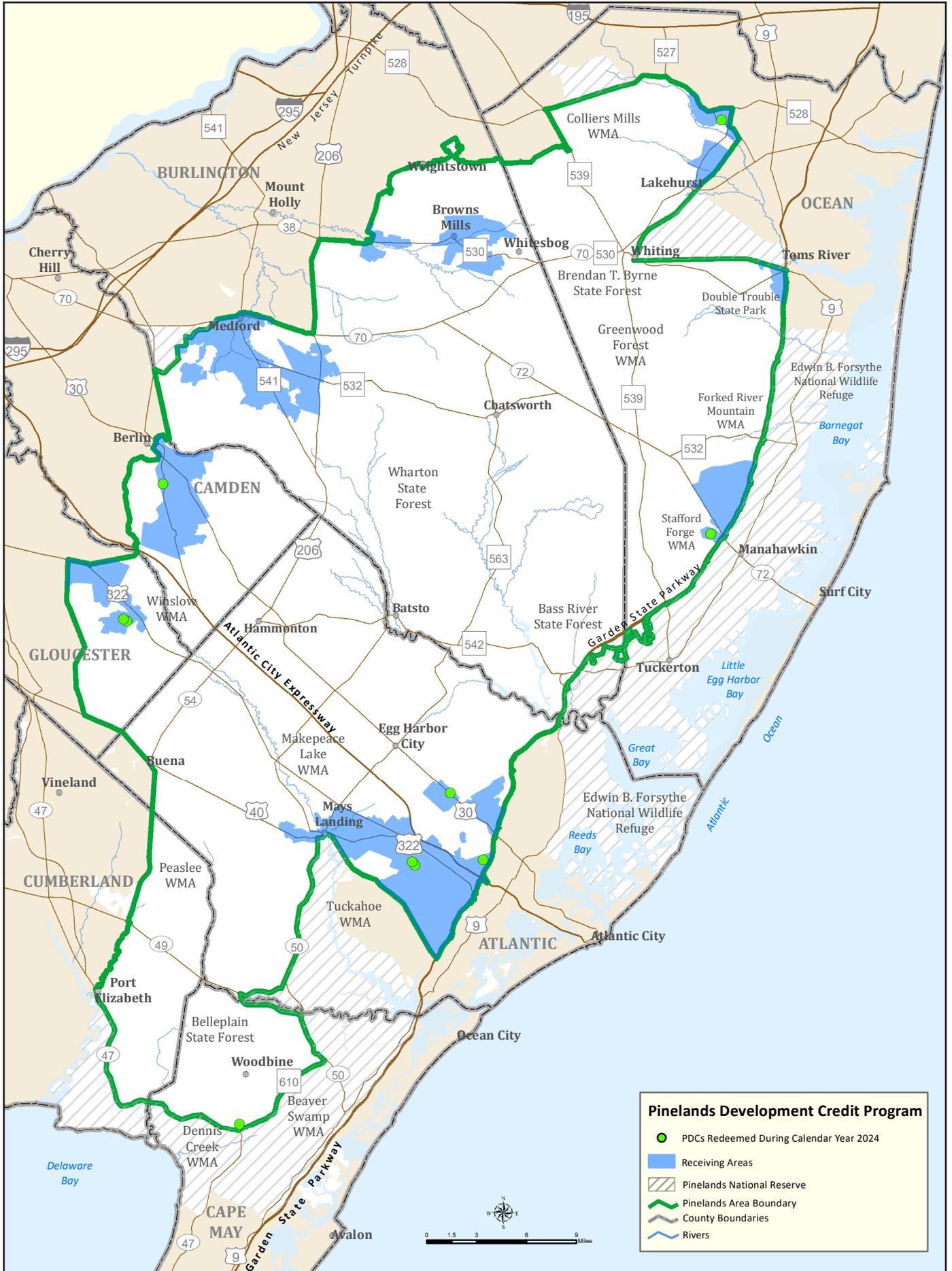
**Above:** Part of a larger cranberry farming operation in Woodland Township, this 404-acre property in the Special Agricultural Production Area was permanently preserved through the severance of 19.50 Pinelands Development Credits in October 2023. Photo/Paul Leakan

Since 1982, 58,351 acres in the Pinelands Area have been permanently preserved through the PDC Program.

In 2024, a total of 10.25 PDCs were sold, with an average sales price of \$86,758 per PDC. This represents a significant increase over the 2023 average sales price of \$73,242. A total of 14.25 PDCs were redeemed for 10 residential projects ranging in size from one to 657 units and involving a variety of housing types, including single-family detached dwellings, townhouses and apartments. These projects are located in Dennis, Egg Harbor, Galloway, Jackson, Monroe, Stafford and Winslow townships, as shown on the map on page 8.



**Above:** 0.50 Pinelands Development Credits were redeemed for the development of five single-family homes in Jackson Township, Ocean County, in August 2021. Photo/Paul Leakan



## Reviewing Municipal Ordinances

The master plans and land use ordinances of all 53 Pinelands municipalities and seven counties must align with the Pinelands Comprehensive Management Plan (CMP). This consistency is ensured through the conformance process, in which municipalities and counties submit any amendments to their master plans and ordinances to the Commission for review and certification.

In 2024, the Commission received and reviewed 186 municipal master plan and ordinance amendments. Many of these amendments revised water management standards in response to updates to the CMP that strengthened protections for the Kirkwood-Cohansey Aquifer. The Commission also observed



a continued trend of municipalities adopting redevelopment plans to regulate development in designated redevelopment areas. In 2024, the Commission reviewed and approved 12 ordinances that either adopted, amended, or rescinded redevelopment plans. As in 2023, these plans aimed to support various local planning objectives, including the development of affordable housing, warehouses, and cannabis-related land uses, as well as the revitalization of underutilized commercial sites. Additionally, the Commission approved a redevelopment plan in Manchester Township requiring the acquisition and redemption of Pinelands Development Credits for any warehouse development within the designated redevelopment area.

## Permanent Land Protection Summit, Update & Priorities

### Land Preservation Summit

A total of 11 public and non-profit organizations involved in permanent land protection participated in the Pinelands Commission's second annual Land Preservation Summit, held on April 4, 2024.

Participants learned about planned funding rule amendments from the NJDEP Green Acres Program and the New Jersey Conservation Blueprint from Rowan University.

Pinelands Commission staff also discussed stewardship monitoring visits to five sites that were permanently preserved with grants from the Commission's Pinelands Conservation Fund, along with and plans for further activities intended to support partners with stewardship challenges.



**Above:** Eleven land organizations involved in permanent land protection participated in the Commission's second annual Land Preservation Program Summit in April 2024. Martha Sullivan Sapp, Director of the NJDEP Green Acres Program, is shown to the left.

Photo/Paul Leakan

## Permanent Land Protection Update

The Commission's staff delivered the annual update on permanent land protection in the Pinelands on October 11, 2024.

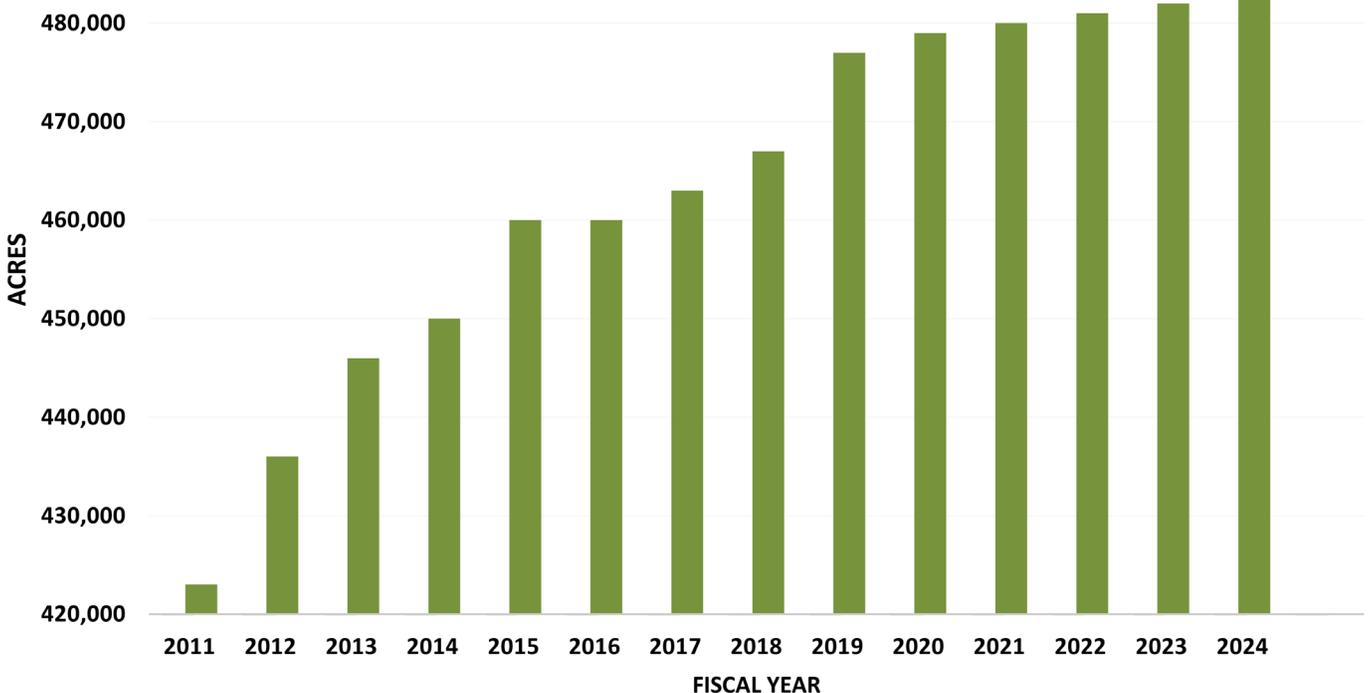
A total of 1,166 acres of land were preserved in the Pinelands Area from July 2023 to June 2024. Of that total, 324 acres were preserved through Pinelands programs, along with 465 acres of land through the Pinelands Development Credit Program.

As of June 30, 2024, 51 percent of the Pinelands Area (483,000 acres) has been permanently protected. Importantly, 94% of the protected land is located within the Preservation Area District, Special Agricultural Production Area, Forest Area and Agricultural Production Area, the conservation areas of the Pinelands that the Commission is charged with preserving and enhancing.



**Above:** As of June 2024, 51% of the land in the Pinelands Area has been permanently preserved, including the 222-acre Piney Hollow Preservation Area in Franklin Township, Gloucester County. Photo/Paul Leakan

## Acres Preserved in the Pinelands Area (Rounded to the nearest thousand)



# Regulatory Activities

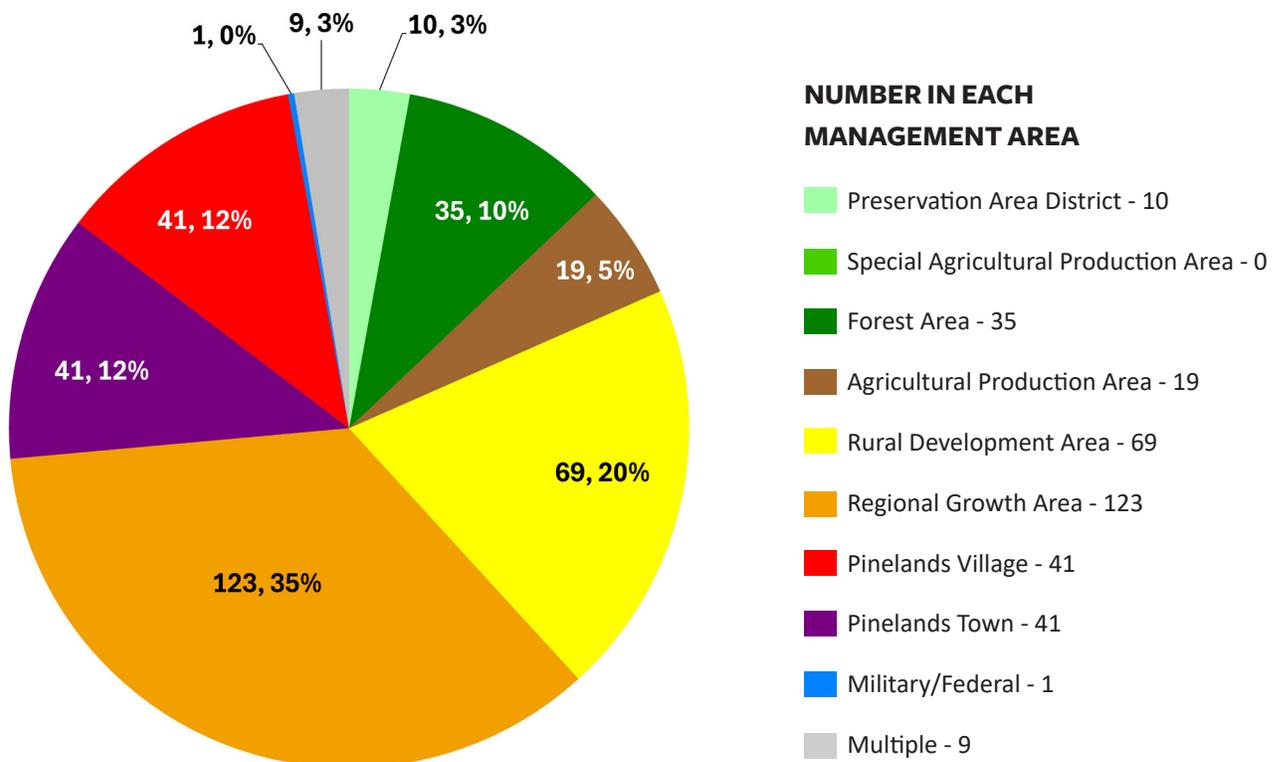
## Applications

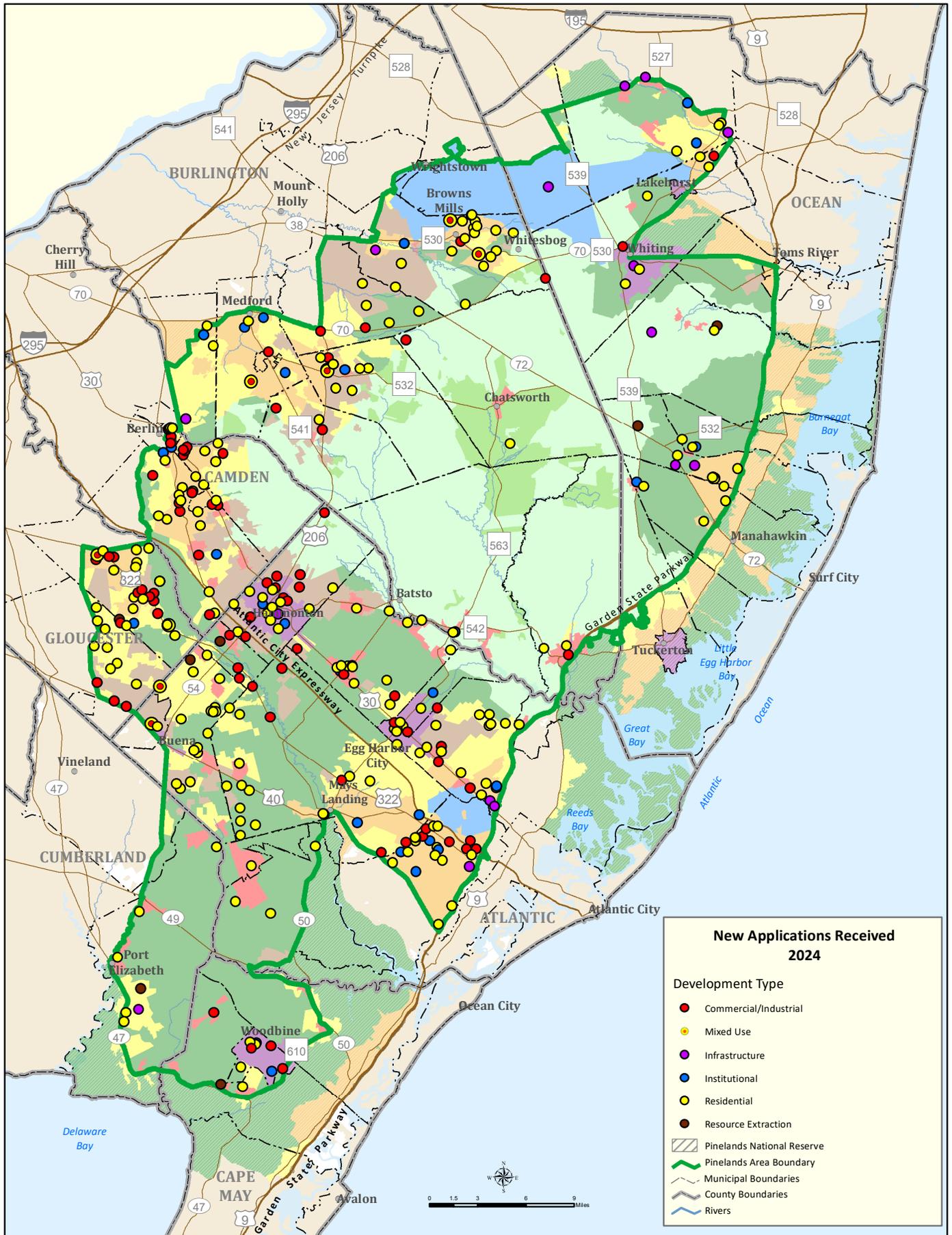
The Pinelands Commission reviews applications for development by evaluating proposals to ensure that they meet the regulations contained in the Pinelands Comprehensive Management Plan. Development proposals must meet a series of environmental standards, including those that protect water quality, wetlands, and threatened and endangered species.

The Commission’s development approval process varies, depending on whether the application is submitted by a public agency or a private landowner. The Commission’s staff reviews private development proposals, such as single-family dwellings, subdivisions, and commercial projects.

The Commission received a total of 348 new applications for development in 2024, with the highest percentage of the applications (35%) proposing new development in Pinelands Regional Growth Areas (or RGAs). There are 24 municipalities with RGAs in the 938,000-acre state Pinelands Area. RGAs make up 8% of the land in the Pinelands Area, and they are generally located on the fringes of the Pinelands boundary. The RGAs include areas of existing development and adjacent lands that have the infrastructure such as sewers, roads and other utilities needed to accommodate new development while protecting the essential character and environment of the Pinelands. The Pinelands CMP encourages future growth in the RGAs as a way to prevent scattered and piecemeal development in other more sensitive portions of the Pinelands Area. Applications for development in the other development-oriented Pinelands management areas (Pinelands Towns and Villages) account for an additional 24% of the total. The pie chart below illustrates the number and percentages of applications received by management area in 2024.

**Development Applications Received in 2024 by Management Area**





A full listing of applications received by development type in 2024 is shown to the right. A majority of the development applications received were for residential development (59%), followed by commercial/industrial development (22.7%), institutional uses (8.6%), infrastructure (5.2%), mixed use development (2.6%) and resource extraction (2%). Of the 205 residential applications received, nearly 94% proposed four or fewer units, defined as “minor” development by the CMP. The remaining 13 residential applications proposed development ranging in size from 5 to 99 units. Applications received for commercial/industrial development proposed a multitude of uses, including new and expanded retail stores, offices, restaurants, day care centers, gas stations, storage yards and facilities, vehicle maintenance

### Development Applications Received in 2024 by Development Type

Development Type	Total
Residential	205
Commercial/Industrial	79
Institutional	30
Infrastructure	18
Mixed Use	9
Resource Extraction	7
<b>Total</b>	<b>348</b>

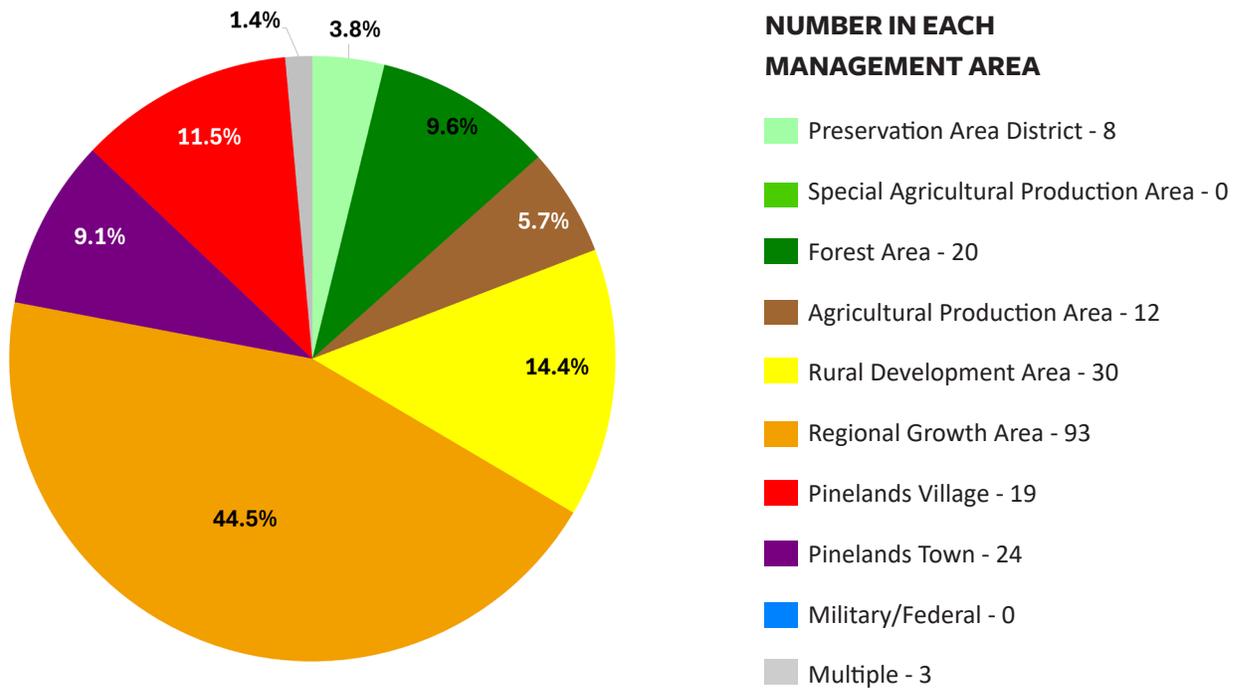
facilities, warehouses, and solar energy facilities. Notably, applications for commercial/industrial development in the Pinelands Agricultural Production Area primarily involved conversion of existing farm structures (barns, storage buildings) to seasonal agricultural employee housing. Infrastructure applications involved roads, bridges, sanitary sewer mains and pump stations, sidewalks, parking lots and wells. Applications for institutional uses included schools, churches, public parks, and government buildings. A small number of projects involving both residential and nonresidential components were also proposed and are categorized as mixed use development.

After applicants provide all of the necessary information, the Commission issues a Certificate of Filing (or CF), signifying completion of an application and allowing an applicant to seek all municipal and county approvals for the proposed development. Other completeness documents include Preliminary Zoning Permits (PZPs) and Notices of Filing, which are issued under alternative permitting programs in accordance with the CMP. These documents certify completeness of development applications and are equivalent to CFs. A total of 209 Completeness Documents were issued in 2024, including CFs, PZPs and Notices of Filing. Most Completeness Documents issued in 2024 (93 or 44.5%) were for proposed development in RGAs, with another 21% in Pinelands Towns and Villages (as shown in the chart on page 14).

Of the 209 Completeness Documents that were issued in 2024, most involved proposals for residential development (136 or 65%). The majority of these residential projects were for development of only one single-family detached home; however, Completeness Documents were issued for six larger residential projects ranging in size from 20 to 235 units. These larger subdivisions, all located in the RGA, proposed a variety of housing types, including single family detached homes, manufactured housing, townhomes, and apartments.

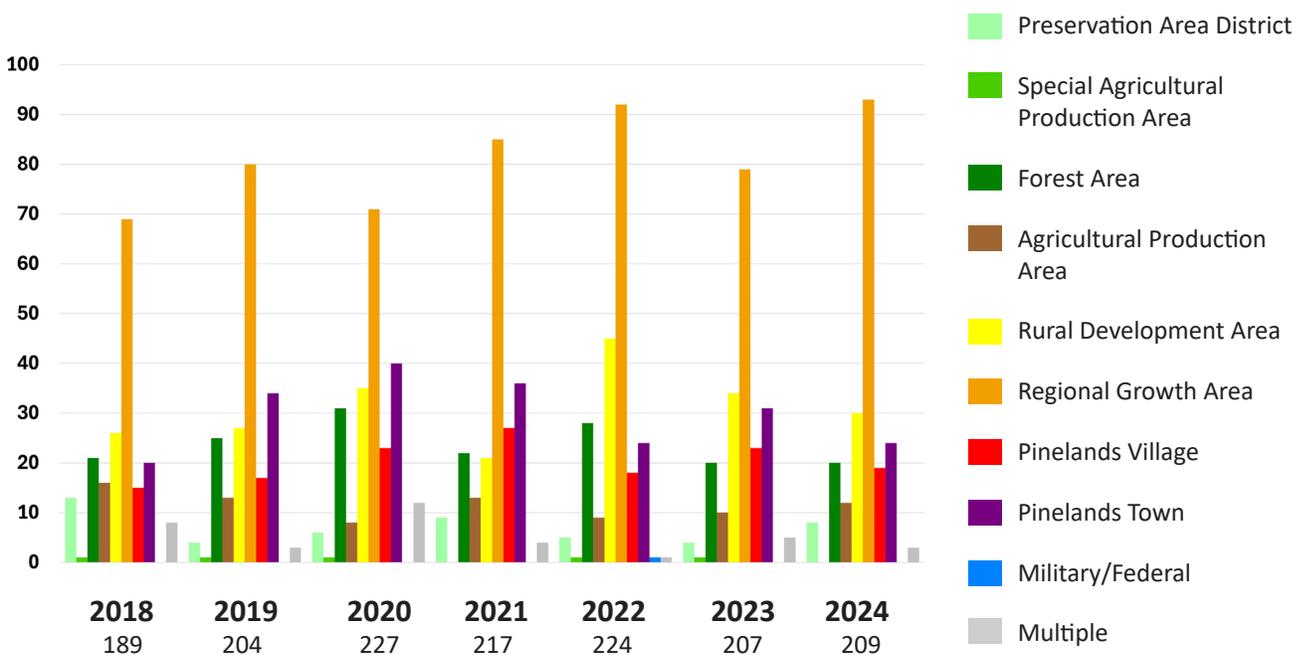
Applications for commercial or industrial development account for the next highest percentage of Completeness Documents issued in 2004 at 25.4% of the total. These applications involve a wide variety of uses, including restaurants, offices, daycare facilities, retail stores, parking lots, campgrounds, storage yards, warehouses, self-storage facilities, cell towers, and solar energy facilities. Nearly two-thirds were issued for projects in development-oriented management areas (RGAs, Towns and Villages).

## Completeness Documents Issued in 2024 by Management Area



As indicated on the bar graph below, the number of Completeness Documents issued annually has been somewhat variable over time; however, the RGA consistently sees the most application activity. On average, between 2018-2024, 211 Completeness Documents were issued each year.

## Completeness Documents Issued by Management Area (2018 - 2024)



## Completeness Documents Issued in 2024 by Management Area and Type of Development

<b>Management Areas</b>	Commercial	Forestry	Infrastructure	Institutional	Residential	Resource Extraction	Mixed Use	Total
Preservation Area District	3	0	0	0	3	2	0	8
Special Agricultural Production Area	0	0	0	0	0	0	0	0
Forest Area	3	0	0	0	15	2	0	20
Agricultural Production Area	4	1	0	0	7	0	0	12
Rural Development Area	2	1	1	1	22	2	1	30
Regional Growth Area	25	0	2	4	60	0	2	93
Pinelands Village	4	0	0	0	15	0	0	19
Pinelands Town	9	0	1	1	13	0	0	24
Military/Federal Installation	0	0	0	0	0	0	0	0
Multiple	2	0	0	0	1	0	0	3
<b>Totals</b>	<b>53</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>136</b>	<b>6</b>	<b>3</b>	<b>209</b>

After an applicant receives any required municipal or county approvals for private development in the Pinelands Area, copies of those approvals must be sent to the Commission. The Commission staff then reviews the approved development and determines whether it meets all Pinelands standards. If it does, the Commission staff will send the applicant a letter confirming that the agency’s review is complete and the permit or approval can take effect.

The Commission staff issued such determinations for 63 development projects in 2024, allowing the associated final municipal site plan and subdivision approvals to take effect. Twenty-nine of these applications (or 46%) were for residential development. In total, 280 residential units were approved, in projects ranging in size from 1 to 80 units. Most approved residential projects were for single-family detached dwellings; however, several of the larger residential subdivisions included townhouses, multifamily (apartment) units or a mixture of housing types.

The Commission staff reviewed and allowed final subdivision or site plan approvals to take effect for 30 commercial or industrial projects. These applications included retail commercial buildings, offices, cell towers, a brewery, a pet crematory, a bed and breakfast, hotels, warehouses, storage yards, and solar energy facilities. The final four approved projects were for institutional uses, infrastructure, and a subdivision involving a large farm and several existing dwellings (deemed “mixed use” for purposes of this report).

The 63 approved applications are located in 23 Pinelands municipalities. The table on page 15 provides a full list of municipalities. Two projects are listed as being located in multiple municipalities. Both proposed the construction of floating solar energy facilities at the site of an existing resource extraction operation located in Franklin and Monroe

### Final Municipal Site Plan/Subdivision Approvals Allowed to Take Effect in 2024 By Development Type

<b>Development Type</b>	<b>Total</b>
Commercial/Industrial	30
Residential	29
Mixed Use	1
Infrastructure	2
Institutional	1
<b>Total</b>	<b>63</b>

townships, Gloucester County. The pie chart at the bottom of the page indicates the Pinelands Management Area in which the approved development will be located.

The Commission staff reviewed approvals for significantly more private development applications than the 63 discussed above during 2024. For example, four municipal permits for resource extraction and 27 municipal demolition permits, most involving demolition of existing homes at least 50 years old, were reviewed and allowed to take effect. Many preliminary site plan and subdivision approvals were similarly reviewed and allowed to take effect, along with numerous municipal building permits, municipal zoning permits, municipal variances, county septic permits, and other types of approvals. Still other approvals were reviewed but determined to be inconsistent with Pinelands standards. Such approvals cannot take effect until the inconsistencies have been addressed.

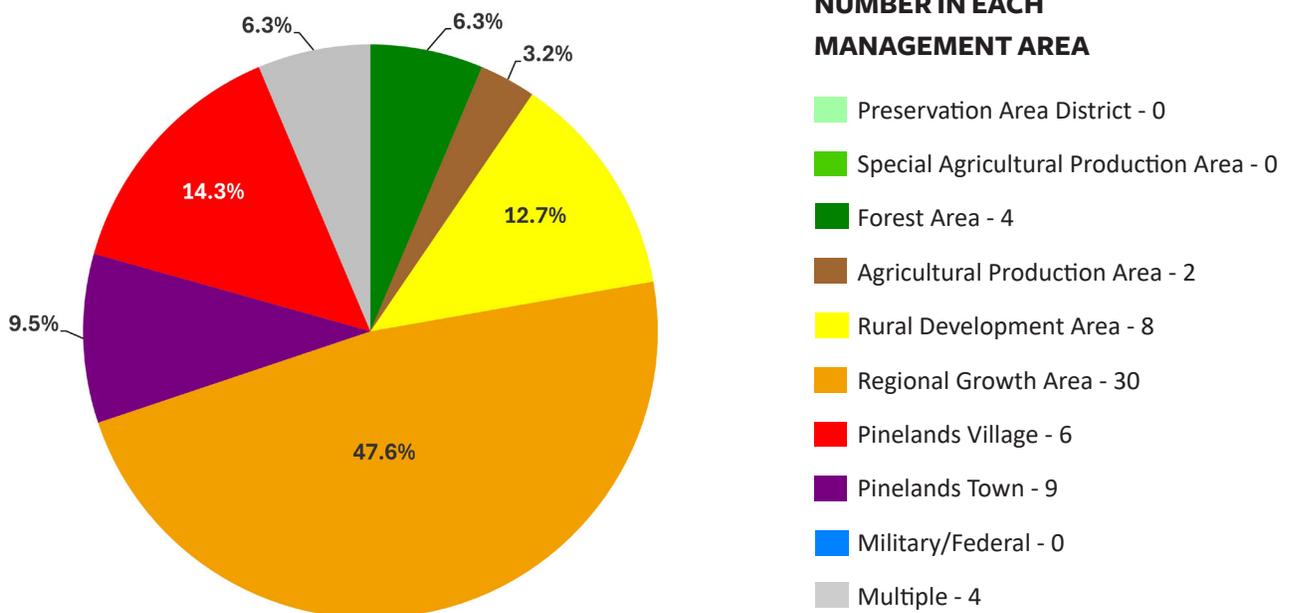
The Pinelands Commission is also responsible for reviewing and approving development applications that are submitted by public entities, such as a municipality, county or a State agency. The full, 15-member Commission votes on whether to approve these applications during its monthly meetings. The Commission received 27 new applications for public development in 2024 for a variety of infrastructure projects, recreational facilities, schools and other public facilities.

A total of 16 applications for public development were approved in 2024, including: installation of an artificial turf athletic field at Cedar

### Final Municipal Site Plan/ Subdivision Approvals Allowed To Take Effect in 2024

Municipality	Number of Applications
Barneget Township	4
Bass River Township	2
Berkeley Township	1
Buena Vista Township	4
Egg Harbor City	1
Egg Harbor Township	6
Folsom Borough	2
Galloway Township	6
Hammonton Town	5
Jackson Township	2
Manchester Township	1
Medford Township	2
Monroe Township	2
Pemberton Township	1
Shamong Township	2
Southampton Township	2
Stafford Township	3
Upper Township	1
Washington Township	1
Waterford Township	4
Winslow Township	7
Woodbine Borough	2
Multiple	2
<b>Total Applications</b>	<b>63</b>

### Final Municipal Site Plan/Subdivision Approvals Allowed to Take Effect in 2024 by Management Area



Creek High School in Egg Harbor City; construction of a local communications facility (cell tower) in Stafford Township; realignment of the intersection at Routes 530 and 70 by the New Jersey Department of Transportation; construction of a new public safety building in Mullica Township; development of a new County recreational facility consisting of athletic fields and trails in Manchester Township; and construction of a Juvenile Justice Commission Secure Facility at the site of the existing Ancora Psychiatric Hospital in Winslow Township.

## **Recreation Permits**

In 2024, the Commission issued 12 Recreation Permits for organized, off-road vehicle events in the Pinelands Area. In order to receive a Recreation Permit, groups must submit a completed “Off- Road Vehicle Event Application” for each proposed event. In addition to the application form, the group must submit the course route in electronic format, an application review fee, proof of insurance, property owner permission and proof that the township and New Jersey State Police have been notified. Commission staff reviews the course route to determine if there are any issues with wetlands, threatened and endangered species, deed-restricted land and private and public ownership. Any portions of the route that have potential issues are site inspected by a member of the Commission’s staff. If any route changes are necessary, a revised route is required and must again be submitted for review.

## **Letters of Interpretation**

Applicants may request the Commission’s interpretation of any standard in the Pinelands Comprehensive Management Plan through issuance of a formal Letter of Interpretation (LOI). LOIs are most commonly issued in response to an applicant’s request for an allocation of PDCs or a determination involving wetlands on a particular parcel. Wetlands LOIs include applications submitted for wetlands presence/absence determinations and verification of wetlands boundaries and required wetland buffers. Once issued, LOIs are valid for five years.

In 2024, 54 new applications for LOIs were submitted to the Commission. The majority of these applications (46 or 85%) were for PDC allocations. Seven of the eight remaining applications were for determinations involving the extent of wetlands and/or required wetlands buffers. The final LOI application requested a determination as to whether a specific accessory use was permitted on a parcel in the Pinelands Forest Area. The Commission issued a total of 31 LOIs in 2024, 28 allocating PDCs and three verifying the extent of wetlands.

## **Waivers**

Some applications may not be able to meet all of the Commission’s land use or environmental standards. In these instances, applicants may elect to apply for a “Waiver of Strict Compliance.” If granted, a waiver typically allows for development of one single-family home. No waivers were approved by the Commission in 2024, which marks the first year in the Commission’s history that no such approvals were issued.

## **Online Enhancements to Further Assist Applicants**

In late 2023, the Commission launched a portal that enables applicants to pay application fees online. Previously, applicants could only submit their application fees by paying via check or money order. Of the total 441 application fee payments that the Commission received in 2024, approximately 39% were paid online.

## **Training Session for Municipal Officials**

The Commission's staff provided an in-depth training for municipal officials on May 15, 2024. Commission staff members delivered six presentations during the 3.5- hour event, which was designed for zoning officers and other municipal staff who are involved with the land development process in the Pinelands. Fifteen people attended the training session at Stockton University's Kramer Hall in downtown Hammonton, with an additional 55 participants attending virtually. Following the event, Commission staff prepared and sent each participant a personalized, signed Certificate of Attendance. Attendees can send the certificate to Rutgers University, which will grant them three technical hours toward the renewal their Rutgers Planning/Zoning Board Secretary, Zoning Official, and Land Use Administrator certificate(s).



**Above:** April Field, the Commission's Chief Permit Administrator, was among the staff members who delivered presentations during the Commission's training session for municipal staff at Stockton University's Kramer Hall in May 2024. Photo/Paul Leakan

## Science & Research Activities

### Long-term Environmental Monitoring Program

#### Rare Snake Monitoring

Long-term data for assessing rare snake population trends in natural areas of the Pinelands are lacking. Therefore, the Commission is establishing a network of natural snake hibernacula, shed areas, and nest sites to monitor long-term changes in two species of rare snakes. As part of ongoing snake studies that were initiated in late 2016, numerous winter hibernacula have been identified for corn snakes and northern pine snakes. Corn snakes are listed as endangered in New Jersey and pine snakes are listed as threatened in the state. From 2018 to 2024, corrals were built around most hibernacula



**Above:** A corral fence installed with metal posts and zip ties that surrounds a snake hibernaculum. Photo/John Bunnell

to capture snakes as they emerge from hibernation in the spring. The corrals offer an effective, non-invasive method to census snakes each spring without physically disturbing hibernacula or hibernating snakes. In the spring of 2024, a total of 83 pine snakes, corn snakes, garter snakes, and black racers emerged from hibernacula

enclosed by corrals.

During rare snake monitoring from 2016 to 2024, 2,408 snakes representing 14 species were found. These include 1,250 corn snakes, 628 northern pine snakes, 193 eastern king snakes, 183 northern black racers, 89 eastern hognose snakes, and 65 snakes of several other species. All snakes were weighed, measured, and tagged with Passive Integrated Transponders (PIT tags). A PIT tag is a tiny, glass-coated microchip commonly used in wildlife research that allows for the permanent identification of an animal through the use of a special scanner that reads the unique tag number. A total of 425 of these processed and tagged snakes were recaptured at least once. Captured snakes that are unaffiliated with a known hibernacula are typically outfitted with surgically implanted transmitters for radio tracking to find new hibernacula, as well as shed sites and nest sites. In 2024, Commission scientists radio tracked 23 corn snakes, 19 pine snakes, and two hognose snakes. These transmitter-outfitted snakes led to the discovery of several new snake hibernation sites late in the year.



**Above:** The Tea Time Hill wildfire burned and collapsed hibernacula corral fencing and scorched the forest. Radio tracked corn snakes survived the fire.  
Photo/John Bunnell

The Tea Time Hill wildfire, which started in early July 2024, removed substantial tree and shrub canopy and damaged snake monitoring infrastructure such as corrals, cover boards, and shed logs in portions of Wharton State Forest. All radio tracked snakes survived the fire, likely avoiding harm by utilizing the porous duff layer beneath the ground surface. A more complete assessment of the impact of this wildfire on snakes will be made in the spring of 2025 after snakes in burned and corralled hibernacula are counted. Science staff were able to replace or repair some of the snake monitoring infrastructure.

## Snake Disease Monitoring

**Snake Fungal Disease:** In 2018, Commission scientists began collaborating with Dr. Joanna Burger of Rutgers University, Mr. Robert Zappalorti of Herpetological Associates, Inc., and Dr. Jeffrey Lorch of the United States Geological Survey (USGS) to conduct research on snake fungal disease in the Pinelands. Snake fungal disease is an emerging disease found in populations of captive and wild snakes and is caused by the fungus *Ophidiomyces ophiodiicola*. Although snakes can show signs of fungal disease just after spring emergence from hibernation, it was previously unknown if *O. ophiodiicola* was present inside the hibernacula.

Dr. Burger and Mr. Zappalorti have been excavating a group of northern pine snake hibernacula annually for almost 40 years. Their long-term study provides a unique opportunity to sample inside snake hibernacula to determine if the fungus is present in the soil or on the hibernating snakes. Initial sampling in 2018 indicated that *O. ophiodiicola* was present on snakes and in the soil inside the hibernacula, therefore all hibernating snakes were swabbed for snake fungal disease annually beginning in 2019.



**Above:** Northern pine snake with snake fungal disease. Photo/John Bunnell

In 2024, all hibernating snakes were sampled again for fungal infections. Results assessing the relationship between sores present on a snake and the clinical evaluation of sores by an investigator and whether the snake is infected were published in the *Journal of Fungi*. This paper and other publications describing the fungal disease results obtained from the artificial hibernacula excavations, are listed below. Science staff continue to maintain and service continuous PIT tag readers at these long-term pine snake hibernacula.

Campbell, L.J.; Burger, J.; Zappalorti, R.T.; Bunnell, J.F.; Winzeler, M.E.; Taylor, D.R.; Lorch, J.M. Soil reservoir dynamics of *Ophidiomyces ophiodiicola*, the causative agent of snake fungal disease. *Journal of Fungi* 2021, 7, 461.

Burger, J.; Gochfeld, M.; Zappalorti, R.; Bunnell, J.; Jeitner, C.; Schneider, D.; Ng, Kelly, DeVito, E.; Lorch, J. M. Prevalence of *Ophidiomyces ophiodiicola* and epizootiology of snake fungal disease in free-ranging Northern Pine Snakes (*Pituophis melanoleucus melanoleucus*) in New Jersey. *Environmental Monitoring and Assessment* 195, 662 (2023) <https://doi.org/10.1007/s10661-023-11259-w>.

Burger, J.; Jeitner, C.; Zappalorti, R.T.; Bunnell, J.F.; Ng, K.; DeVito, E.; Schneider, D.; Gochfeld, M. Snake fungal disease in free-ranging northern pine snakes (*Pituophis melanoleucus melanoleucus*) in New Jersey: lesions, severity of sores and investigator's perceptions. *Journal of Fungi* 2024, 10, 125. <https://doi.org/10.3390/jof10020125>.

Building on the fungal disease results obtained from the artificial hibernacula excavations, Commission scientists began collaborating with researchers at Virginia Tech to swab for fungal disease from snakes that were collected from the natural hibernacula, nest sites, and shed sites discovered as part of the Rare Snake Monitoring component. In 2023, swab samples from 164



**Above:** Snake eggs and hatchlings, such as these emerging pine snakes, were also tested for the presence of snake fungal disease. Photo/Patrick Burritt

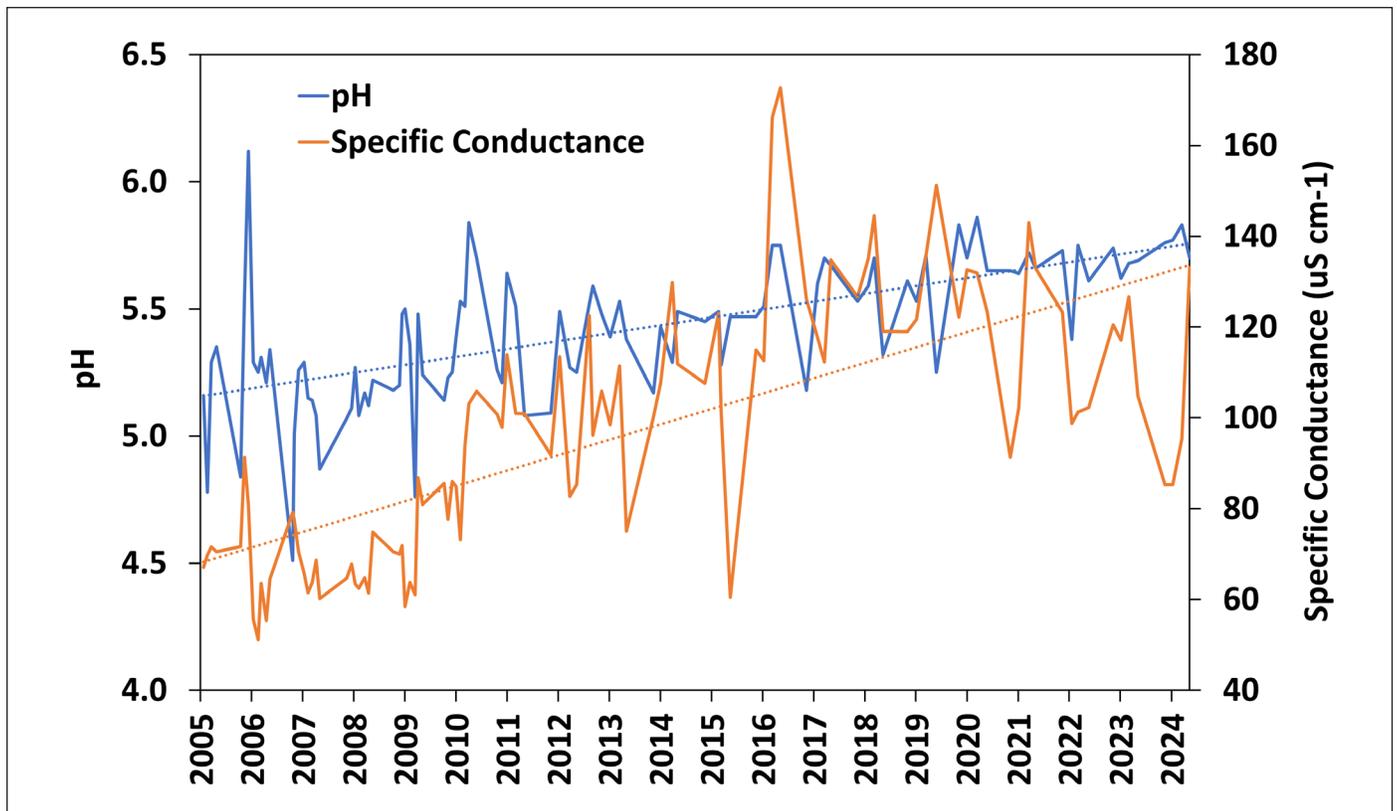
snakes were sent to Virginia Tech for analysis. Results for the first batch of 80 swab samples indicated that 30% of the sampled snakes tested positive for *O. ophidiicola*, the fungus associated with snake fungal disease.

In 2024, staff continued to collect samples for snake fungal disease analysis by swabbing 292 snakes representing 11 species. Commission scientists also began snake fungal disease sampling of egg clutches that were incubated in the lab. Swab samples were collected from eggs, hatchlings, and nesting materials associated with 12 clutches of corn snake eggs and 12 clutches of pine snake eggs.

**Adenovirus Monitoring:** As part of a collaboration with Dr. Anthony Geneva of Rutgers University, Commission scientists swabbed Pinelands snakes to test for the presence of adenovirus. Adenoviruses affect the gastrointestinal tract and liver of some reptile species, including snakes. In 2023, swab samples from 216 snakes were sent to Rutgers University for analysis. An additional 276 snakes, representing 10 species, were swabbed for adenovirus analysis in 2024.

**Other Environmental Monitoring:** Other 2024 environmental monitoring activities included surveying calling frogs and toads in March and April at a group of ponds that are surveyed annually, measuring water quality at 37 ponds, measuring bimonthly water quality at 47 stream sites, recording monthly water levels at 35 forest plots and 30 ponds, and maintaining continuous water-level recorders installed in seven other ponds and in a shallow observation well installed within a pine lowland forest. At two of the ponds equipped with continuous water-level recorders, science staff installed solar-powered weather stations to collect water level, water and air temperature, precipitation, and humidity data. The weather stations enable staff to view and download the data remotely. Staff also met with law enforcement and visited ponds in the Commission monitoring program in Brendan T. Byrne State Forest that were damaged by trucks or other types of off-road vehicles.

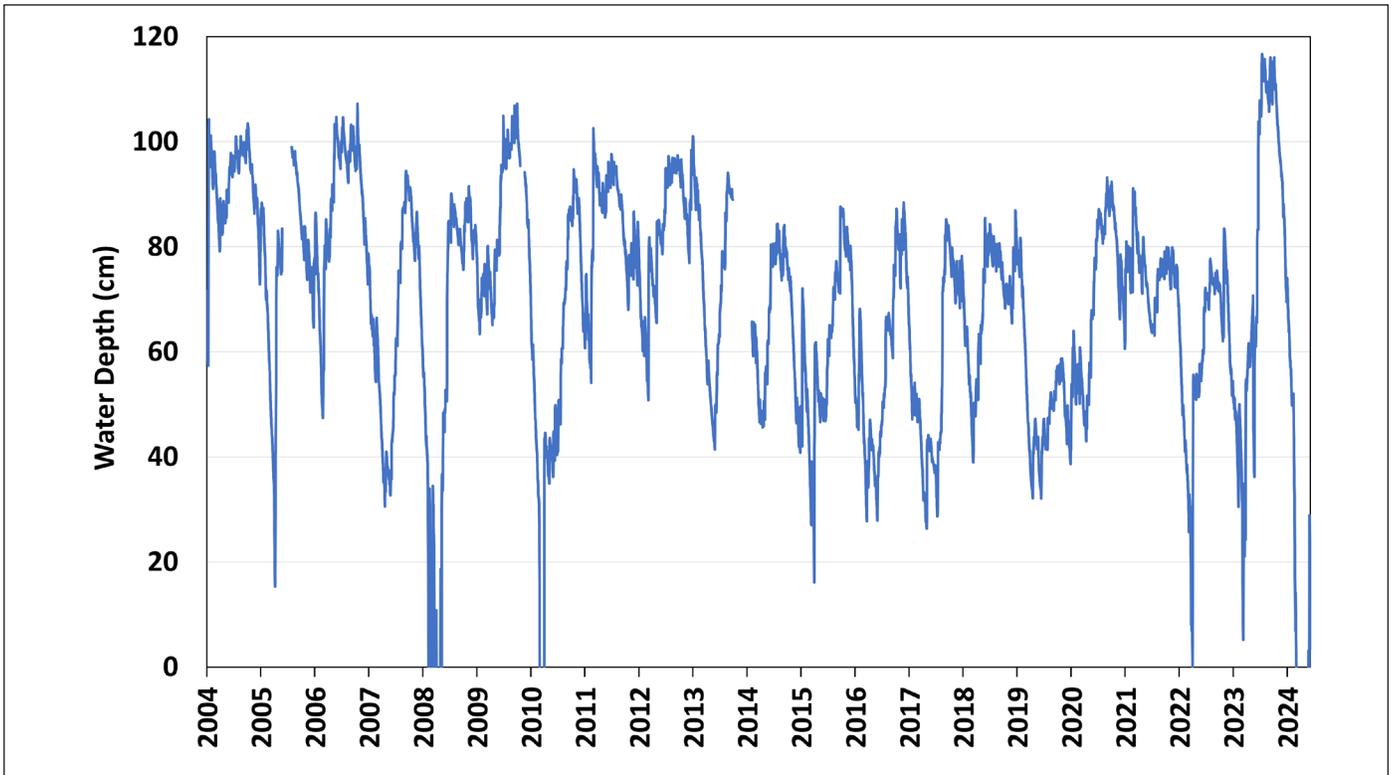
Long-term environmental monitoring research is being funded by the National Park Service.



**Above:** Median pH and specific conductance values from 2005 - 2024 at Four Mile Branch at Lighthouse Road, one of 47 stream sites where water quality is monitored. Increasing trends for both parameters reflect the high percentage of developed land in the Four Mile Branch watershed.



**Above:** In 2024, all water level monitoring ponds dried due to a prolonged drought. Drought conditions are evident at this typically inundated pond in Colliers Mills Wildlife Management Area. Photo/Chris Jeitner



**Above:** Water-level data from June 2004 – December 2024 for Butterworth Pond in Brendan T. Byrne State Forest. Values of zero indicate this pond dried only four times in the past two decades.

## Joint Corn Snake Radio-tracking and Drift Fence Study

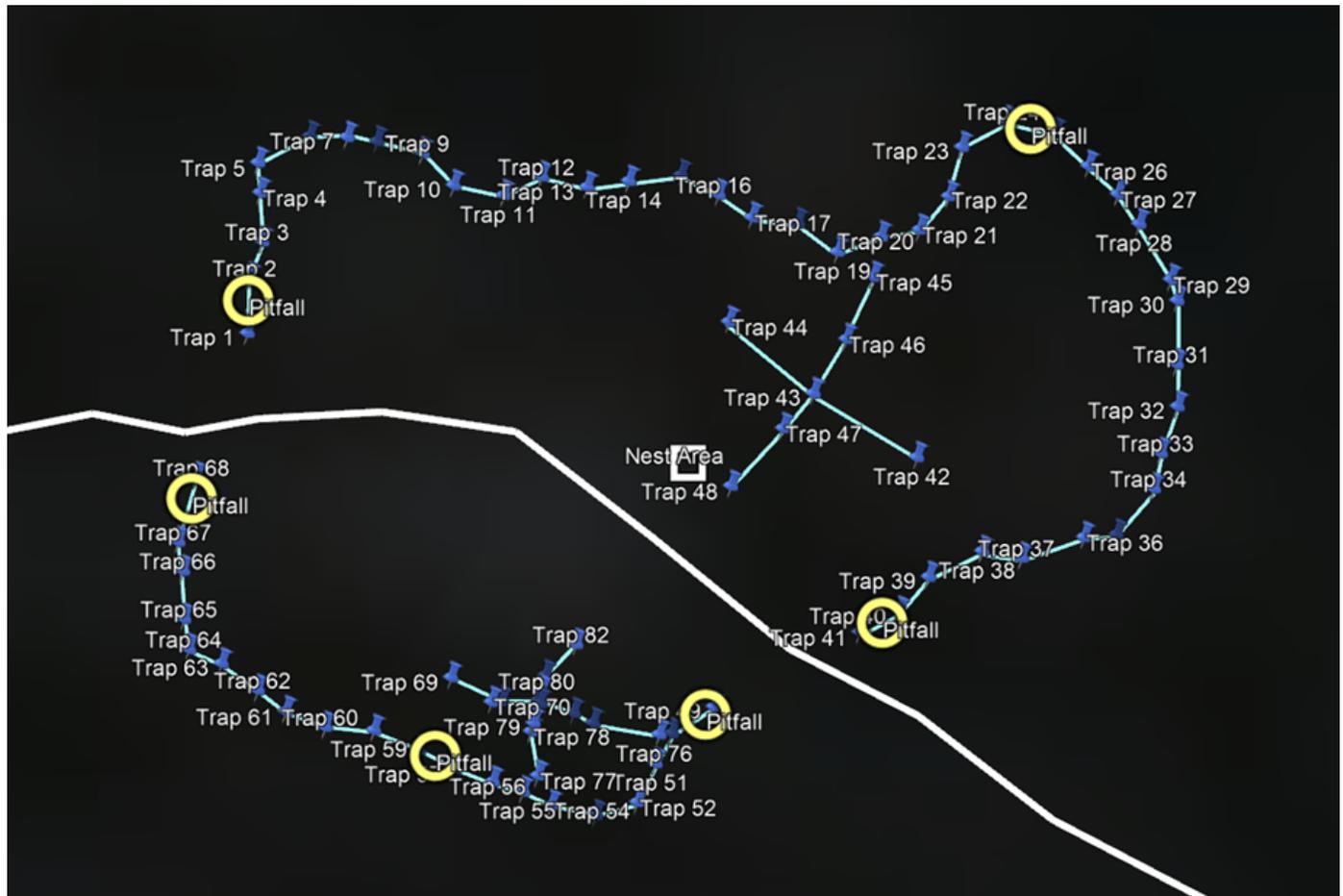
In 2016, Commission scientists began to collaborate with Dr. Howard Reinert of The College of New Jersey, Mr. Robert Zappalorti of Herpetological Associates, and the NJDEP Endangered and Nongame Species Program staff to conduct an intensive research project on the corn snake in the Pinelands. As mentioned previously, the corn snake is listed as an endangered species in New Jersey. The goals of the corn snake research are to better understand the habitat requirements and life history of this secretive serpent to develop meaningful

conservation management programs for the species and ensure its continued survival in the Pinelands.

The research includes two components: radio-telemetry and headstarting, which is a conservation technique where vulnerable young animals are raised in captivity until they attain a larger size and then released into the wild. For the telemetry aspect, researchers surgically implant small radio-transmitters in adult corn snakes and locate the snakes on a regular basis to collect data on their activity range; types of habitats used; and the locations for nesting, shedding, and hibernation. In 2019, scientists completed radio-tracking of 29 corn snakes, which concluded the telemetry component of the study. Corn snake telemetry data will be analyzed by Commission scientists.

For the headstarting component of the study, researchers collected corn snake eggs from nest areas and transported them to a laboratory for incubation and hatching. The hatchlings were PIT tagged and one-half of them were released back to the primary nest area as cold released snakes. The other group of hatchlings were kept in the laboratory over the winter and released the following spring as headstarted snakes. The goal is to recapture as many of these snakes as possible to assess growth and survivorship of the cold released and headstarted hatchlings over time.

In 2019, a drift fence array was established at the primary nest area to help recapture corn snake hatchlings to assess the survival of headstarted and cold released hatchlings. An equally important goal was to assess the effectiveness of using a drift fence outfitted with box traps and artificial wood and metal cover to detect corn snakes and other species of snakes. During the final year of the study, a series of pitfall traps were installed in the ground along the fence. A total of 7,644 animals were found along the drift fence, under the artificial cover associated with the fence, or in the traps. These 7,644 animals included 15 species of snakes and 22 species



**Above:** Schematic of drift fence and trap array that was installed to recapture corn snakes and to assess survey methodology.



**Above:** Portion of drift fence array showing box trap and metal and wood cover used to capture snakes. Photo/John Bunnell

of other animals, including toads, frogs, salamanders, lizards, turtles, mammals, and birds. The drift fence was removed from the area at the end of 2022. In 2023, the headstarting component of the study was completed. For the 2016 – 2023 period, a total of 225 corn snake hatchlings, including 120 cold released and 105 head started hatchlings, were released. Ten cold released and 19 head started snakes were recaptured during that time period.

In 2024, Commission scientists began analyzing the drift fence data to determine the relative and combined effectiveness of box traps, wood cover, metal cover, and pitfall traps in detecting the presence of snakes. Scientists also continued to monitor corrals and strategically place cover in nearby areas to survey for new and previously pit tagged snakes. During the 2024 nesting season, two head started female corn snakes that were released as hatchlings in 2019 and 2020 returned to the nest area to lay eggs and were recaptured. These snakes each gave birth to clutches of seven eggs, and the hatchlings were pit tagged and released at the nest area.



**Above:** One of 82 box traps installed as part of the drift fence array. This trap captured a timber rattlesnake. Photo/John Bunnell

**The number of snakes found at the drift fence array in pitfall traps, under metal and wood board cover, along the fence, and in box traps.**

Species	Pitfall	Metal	Board	Fence	Box trap	# individuals
Northern brown snake					1	1
Northern scarlet snake					1	1
Eastern king snake					2	2
Eastern worm snake		1			2	3
Timber rattlesnake		1			2	3
Eastern hognose snake		1		1	7	9
Northern pine snake			1		8	9
Eastern garter snake		1		2	16	19
Northern water snake	1			1	21	23
Eastern ribbon snake	1			2	29	32
Rough green snake			1	18	23	42
Northern black racer		1	7	6	48	62
Corn snake	4	15	22	3	23	67
Southern ringneck snake	3		1		72	76
Northern redbelly snake	1				125	126
Total # of individuals	10	20	32	33	380	475

This Joint Corn Snake Study is being funded by the Pinelands Commission and the New Jersey Department of Environmental Protection.

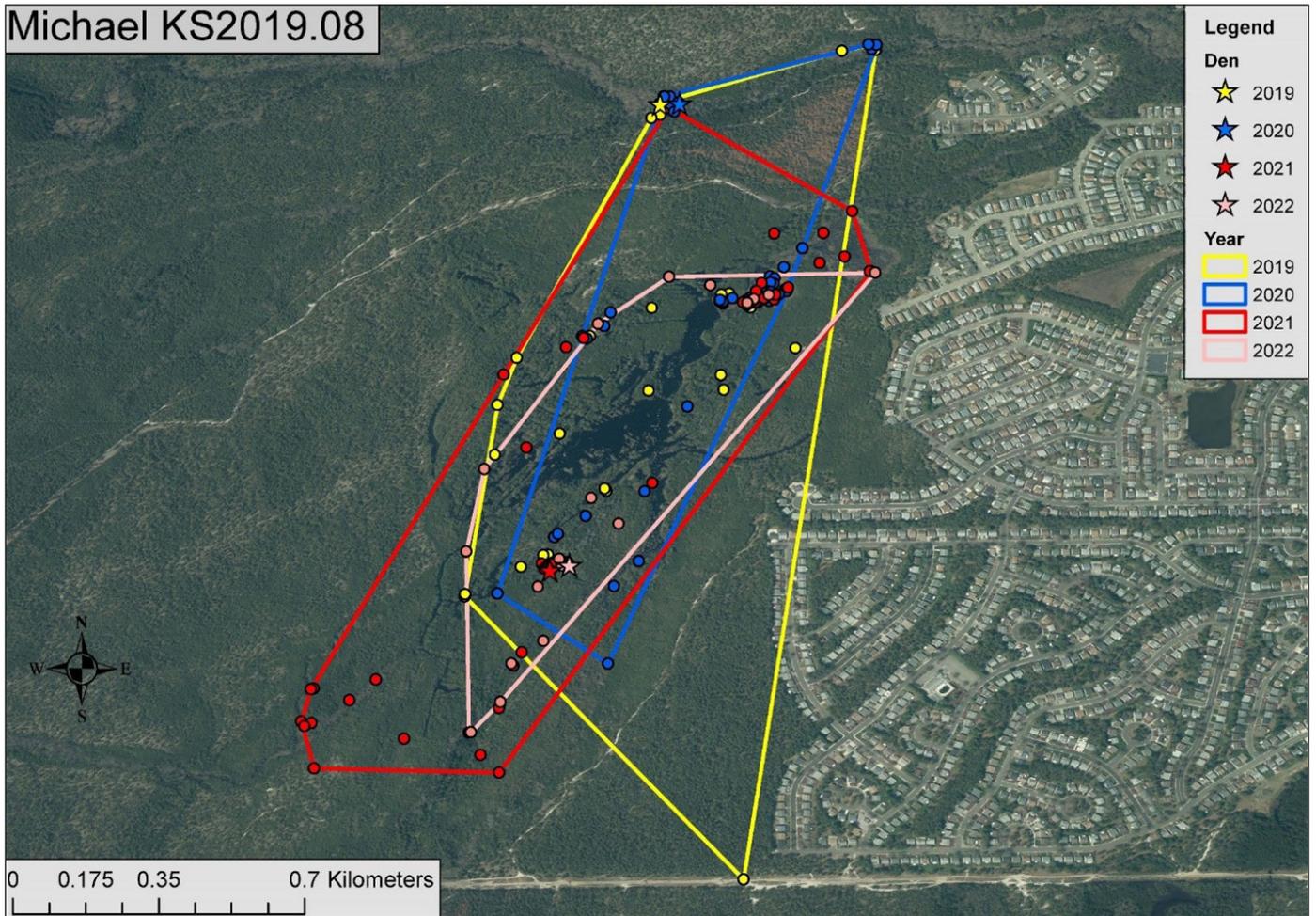
### Eastern King Snake Study

In 2019, the Commission was awarded funding for a grant proposal, titled “Activity range, habitat use, shedding, denning, and nesting of the wetland-dependent eastern kingsnake.” The eastern king snake is listed as a species of special concern in New Jersey because it is vulnerable to multiple threats, is potentially declining, and its distribution and population status are not known. Commission scientists collaborated with Mr. Robert Zappalorti of Herpetological Associates and Dr. Howard Reinert of The College of New Jersey on this four-year study. Scientists used radio-telemetry to determine the activity range; upland and wetland habitat use; and timing of shedding, denning, and nesting of the eastern king snake.



**Above:** Eastern king snake. Photo/John Bunnell

From 2019 to 2022, scientists radio-tracked 47 king snakes, including 23 females and 24 males. Of the 47 king snakes, 22 snakes hibernated, 20 died, four were released, and one went missing. Radio-tracking was completed in 2022. Science staff characterized the habitat structure and forest type of 52 king snake hibernacula identified



**Above:** Activity ranges of a single eastern king snake that was radio tracked from 2019 to 2022.

during the study.

In 2024, a request for supplemental funding and a no-cost project extension received approval by the U.S. Environmental Protection Agency (EPA). Science staff began to analyze the king snake study data in preparation for completing a final report. One of the first steps in the analysis is to compile telemetry statistics for each of the 47 king snakes, such as the size of activity area, maximum distance traveled from hibernaculum, and the number of days spent in the hibernaculum.

This research is being funded by a grant from the EPA and a match by the Commission through the Pinelands Conservation Fund.

## Eastern Box Turtle Study

In 2021, the Commission began to radio-track eastern box turtles. This species is listed by the NJDEP as a species of special concern because it is vulnerable to multiple threats, its distribution and population status in the state are not well understood, and it is potentially declining throughout its range. One goal of this research on box turtles is to gather data on turtle behavior, habitat use, movement, and use of nest sites and hibernacula in the Pinelands. Another goal is to monitor turtles in burned and unburned areas to better understand the relationship between turtles and prescribed fire. In 2021, a total of 20 box turtles were captured and outfitted with external transmitters and radio-tracked about once each week. The turtles were tracked to their winter hibernation areas.

In 2022, Commission scientists checked the box turtles frequently in spring to detect when they emerged from hibernation burrows. New turtles found at existing study sites were captured, processed, and tracked. In November 2022, 36 turtles were tracked to hibernation burrows, and geographic coordinates were collected at these locations.

In 2023, Commission scientists characterized the overwintering location of the 36 turtles by measuring the thickness of the leaf litter, thickness of the partially decomposed organic layer, depth to the sand, and depth of the hibernating turtles. Additional turtles found while radio-tracking the 36 turtles after spring emergence were measured and weighed, and radio-transmitters were glued on their shells to track them as part of the study. A total of 68 box turtles were radio-tracked in 2023. In the fall, staff affixed iButtons to the shells of 26 of these turtles to collect temperature data of the turtle before, during, and after the hibernation period. Staff also assessed the overlap of box turtle activity ranges and overwintering locations with areas approved for prescribed burning by the New Jersey Forest Fire Service in preparation for the upcoming burn season. An agreement between the Commission and the NJDEP for the NJDEP to provide some funding for the box turtle study was executed.



**Above:** Female box turtle with attached radio transmitter on the right and iButton to collect temperature data on the left. Photo/John Bunnell

In 2024, staff installed iButtons to monitor the air temperature above the hibernacula of the 26 turtles equipped with shell iButtons. Temperature data collected from the iButtons will enable staff to more accurately determine



**Above:** Aftermath of a prescribed fire that occurred in March over a hibernating box turtle. The duff layer was peeled back so staff could assess the condition of the turtle. Photo/John Bunnell

when turtles emerge from hibernation burrows in the spring. Staff continued to work with the New Jersey Forest Fire Service to coordinate prescribed burning where there are clusters of radio-tracked turtles. In March, prescribed burns occurred in the vicinity of two of the radio-tracked box turtles. Both turtles were hibernating at the time of the fires and, though leaf litter was burned away at the surface, the turtles had no visual wounds or marks from the fires. In July, the Tea Time Hill wildfire burned in the vicinity of seven radio-tracked box turtles. All turtles survived, although one turtle had a radio transmitter antenna burn off and some of the turtles made large movements across the landscape in apparent response to the fire.

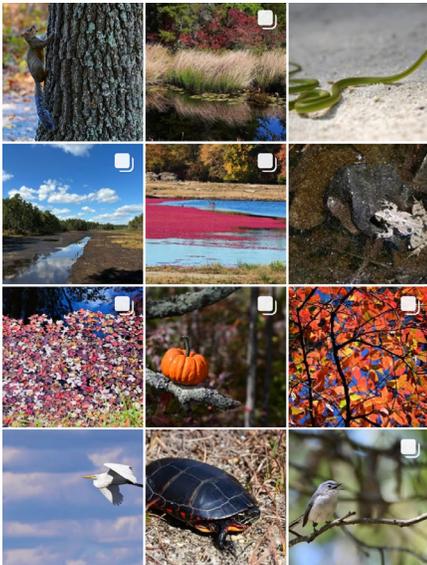
During 2024 radio-tracking, additional turtles were captured and incorporated into the study by attaching transmitters and radio-tracking them. Currently, 80 box turtles (42 females and 38 males) are being radio-tracked. Prior to hibernation, all turtles large enough to bear additional weight were equipped with iButtons for collecting body temperature data.

# Public Information, Education & Outreach

## Raising Awareness, Fostering Stewardship

The Commission continued to raise awareness and appreciation of the Pinelands in 2024, educating thousands about the region's resources.

The Commission co-sponsored and carried out the 35th annual Pinelands Short Course at Stockton University's main campus in Galloway Township on March 9, 2024. More than 500 people attended the event, which offered 30 presentations, including 14 new programs. Event evaluations were overwhelmingly positive, with more than 96% of survey respondents rating the event as excellent or good.



**Above:** The Commission's Instagram site has more than 4,700 followers.

More than 100 people attended the 8th annual Pinelands Summer Short Course on June 28, 2024. The daylong, educational event was held at Stockton University's Kramer Hall in downtown Hammonton. The event featured 11 classroom sessions at Kramer Hall and four field trips. (Please see the photos on page 29.)

Staff educated almost 100 students from Hammonton Middle School during the

annual, Pinelands-themed World Water Monitoring Challenge at Batsto Lake on October 25, 2024. Students wore waders and used nets to catch fish from Batsto Lake while learning about the Pinelands. The event was co-organized and staffed by the Commission, NJDEP, New Jersey Division of Parks & Forestry, and Americorps Ambassadors. (Please see the photo on page 29).

The Commission also organized and hosted three educational presentations at its headquarters in 2024. The first presentation, "Wildlife of the Pinelands," was delivered by the staff of the Woodford Cedar Run Wildlife Refuge and included live animals. The second presentation, "If You Plant It, They Will Come: The Importance of Native Plants in the Landscape,"

## By the Numbers:

In 2024, the Commission's staff:

- Responded to nearly 1,000 public inquiries about recreation, general information about the Pinelands and the Commission, and other non-development application questions;
- Organized and carried out the 35th annual Pinelands Short Course, the 8th Pinelands Summer Short Course, the annual, Pinelands-themed World Water Monitoring Challenge events. The events educated a total of more than 700 people;
- Organized, promoted and staffed three educational presentations that were held at the agency's headquarters as part of the Pinelands Speaker Series. The presentations educated a total of approximately 100 people;
- Educated more than 1,500 people while delivering more than 20 programs;
- Took and shared 2,307 photos and 55 videos on the agency's Instagram site and shared 804 tweets on X (formerly known as Twitter);
- Uploaded/archived 35 videos that on the Commission's YouTube Channel, garnering 123 new subscribers, 437 shares and 22,300 views for the year;
- Maintained, updated and enhanced the Pinelands Commission's website; and
- Maintained and oversaw the Commission's online store, which netted more than \$2,189.40 in sales for the year. (See pages 31 - 32).

was delivered by Randi V. Wilfert Eckel, PhD, and included a tour of the Commission's native gardens. The third presentation focused on the "Hidden Kingdom of Fungi," and it was delivered by Keara R. Giannotti.

Commission staff also educated hundreds of students during dozens of presentations in schools, libraries, and other venues in 2024.

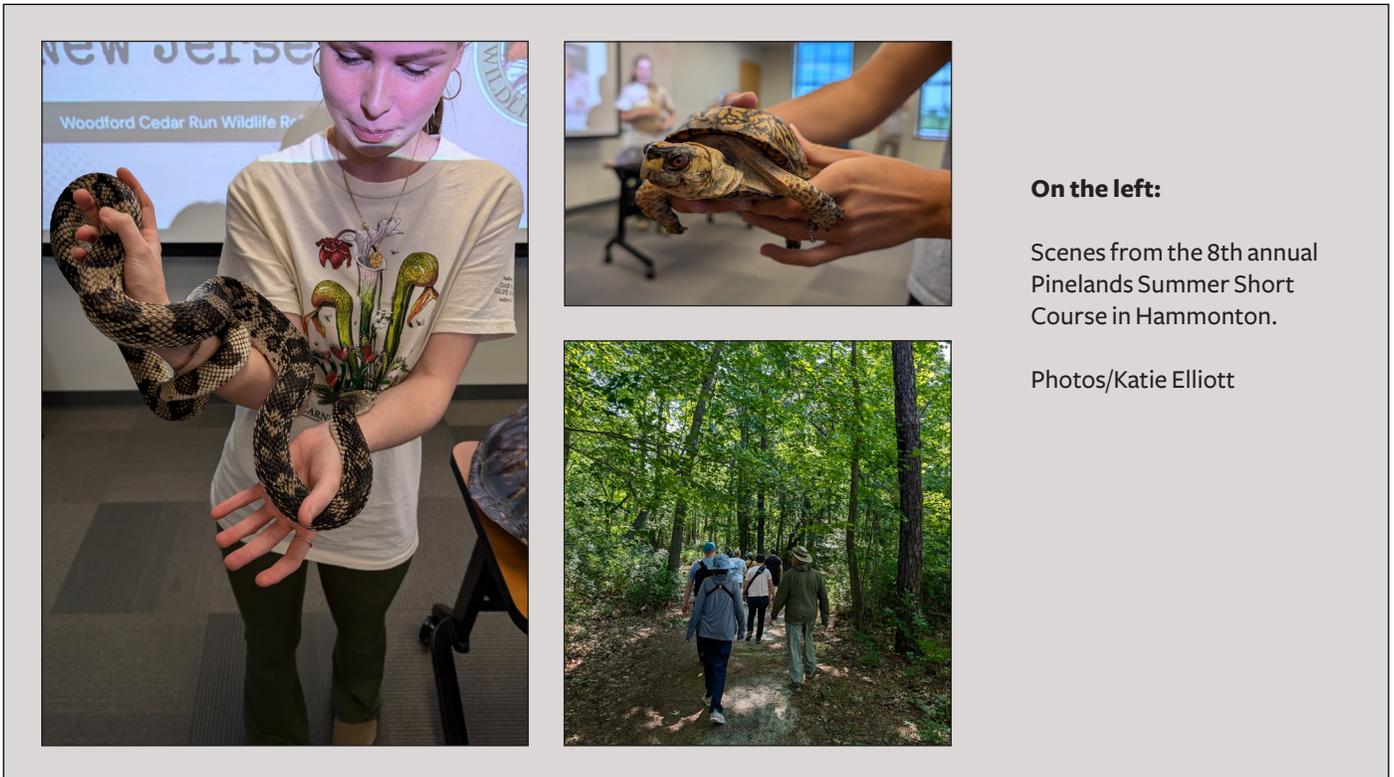
Meanwhile, Commission staff sought to heighten appreciation of the Pinelands and the Commission's work by posting daily on its social media sites. Staff shared 55 videos, 2,307 photographs, links to meetings and the agency's monthly management reports, press releases, public notices, job postings, and interactive Pinelands trivia contests on its Instagram account. SJ Magazine recognized the Commission's Instagram account in its 2024 Best of SJ Awards. Staff also shared 804 tweets on its X account, including direct links to livestream Commission meetings and numerous messages about wildfires and safety precautions related to wildfires in



**Above:** Almost 100 students donned waders and used nets to catch fish during the Commission's annual, Pinelands-themed World Water Monitoring Challenge at Batsto Lake. Photo/Paul Leakan

2024. Staff also uploaded dozens of additional videos to the agency's YouTube channel, which now has over 1,300 subscribers.

Lastly, the Commission continued to educate the public by promoting visitation of the Candace McKee Ashmun Education Exhibits at its office in Pemberton Township.



**On the left:**

Scenes from the 8th annual Pinelands Summer Short Course in Hammonton.

Photos/Katie Elliott

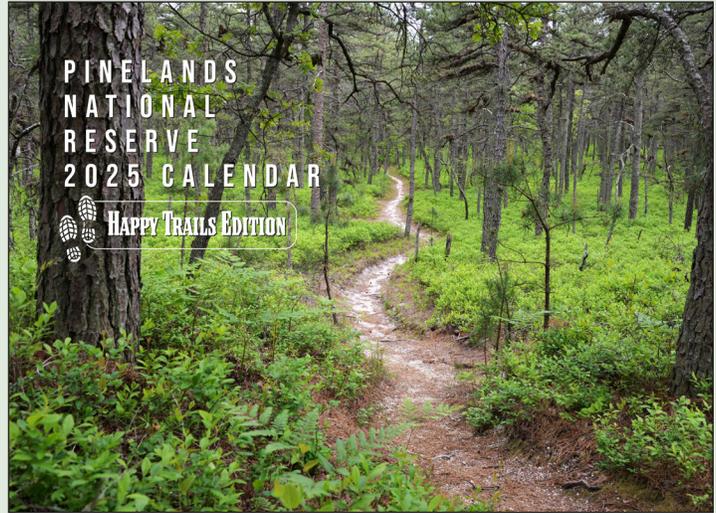
## Pinelands National Reserve Calendar

The Pinelands Commission issued its eighth edition of the Pinelands National Reserve wall calendar in early December 2024.

The calendar features a theme of “Happy Trails,” and it includes 38 photos that highlight a variety of trails in State Parks and Forests, County Parks, Municipal Preserves, a National Wildlife Refuge, and on lands owned/managed by non-profit conservation organizations in the Pinelands National Reserve.

The Commission worked with Rowan College at Burlington County to design and print the calendar. All of the photos were taken by members of the Commission’s staff.

In addition to the photos of the region’s resources, the calendar includes State holidays, dates of Pinelands Commission meetings, important dates in Pinelands history, and a new map that shows the featured trail sites and can be downloaded via a QR code. A total of 1,200 copies of the calendar were printed and distributed free of charge at Bass River State Forest, Batsto



**Above:** The front cover of the 2025 Pinelands National Reserve wall calendar shows a section of the 53-mile Batona Trail, which traverses Brendan T. Byrne State Forest, the Franklin Parker Preserve, Wharton State Forest, and Bass River State Forest.

Village, Belleplaine State Forest, Brendan T. Byrne State Forest, Cloverdale Farm County Park, Estell Manor Park, Jakes Branch County Park, the Richard J. Sullivan Center, Wells Mills County Park, and Whitesbog Village.

The project was funded by the National Park Service.



**Above:** Dr. Randi V. Wilfert Eckel educated more than 30 people about the importance of native plants during a presentation hosted by the Commission in 2024.

Photo/Paul Leakan

# Finances

## Fiscal & Budget

The Commission's Operating Budget for Fiscal Year 2024 totaled \$6,896,895. Of this, \$6,034,330, or 87.5% percent, was budgeted for personnel expenses.

Budgeted revenue sources included \$390,500 in federal grants, a \$3,549,000 State appropriation, \$782,000 in State grants and other State funding, \$700,000 in application fees and \$1,475,395 from the Commission's fund balance and reserves.

The budget for the Pinelands Conservation Fund was \$964,866.

During 2024, the State Auditor completed the Commission's Audit Report for Fiscal Year 2021 and began work on the Audit Report for Fiscal Year 2022.

## Pinelands Application Fees

Since April 2004, the Pinelands Commission has received application fees to partially underwrite the direct costs associated with reviewing development applications in the Pinelands Area. During Fiscal Year 2024, unaudited application fee revenues actually collected totaled \$1,085,112.12 (\$69,573.82 less) than Fiscal Year 2023.

## Pinelands Merchandise & Online Store

The Commission netted \$2,189.40 in sales of Pinelands merchandise in 2024, while processing a total of 68 transactions.

The agency started selling Pinelands merchandise after launching its online store in 2023, with all proceeds from sales benefiting a fund that supports native plantings and raises awareness of native vegetation. The [online store is accessible via the Commission's website](#), and it enables the public to purchase mugs that feature a photo and information about the iconic Pine Barrens treefrog, Pine Barren Gentian or the Jersey Devil, along with reusable grocery/market tote bags and note cards.

All proceeds from sales go to the Kathleen M. Lynch-van de Sande Fund. The fund was established in memory of Ms. Lynch-van de Sande, a NJ Pinelands Commission Environmental Specialist who died in a car accident in June 1989. Sales and donations will support the planting of native Pinelands plants and projects that raise awareness about native Pinelands plants.

Over the years, thousands of dollars have been dedicated to the fund's mission. To date, three arboretums were funded at area schools and over 35 scholarships were awarded to a senior majoring in the environmental field



**Above:** The Commission sold Pinelands-themed mugs and Jersey Devil tote bags at the Pinelands Short Course and during Pinelands Speaker Series presentations at the agency's headquarters in 2024.

Photo/Paul Leakan

from each high school in the Pinelands. It also funded the creation of a rain garden that serves as a model for rain gardens in the Pinelands.

Proceeds from sales and donations to the fund will support future rounds of grant funding for projects that focus on native plants in the Pinelands.

### **Certification**

As required by State Executive Order #37, all State authorities are required to certify that during the preceding year the authority has, to the best of its knowledge, followed all of the authority's standards, procedures, and internal controls. I hereby certify to the best of my knowledge that, during the 2024 calendar year, all of the Commission's standards, procedures, and internal controls were followed.



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Susan R. Grogan  
Executive Director

# Scenes around the Pinelands in 2024



**Above:** Native pickerelweed attracts pollinators like a super magnet, including this native eastern tiger swallowtail butterfly. This photo was captured in Wharton State Forest.



**Above:** Hikers can walk through a corridor of Atlantic white cedars along the 1.9-mile Nature Trail at Double Trouble State Park, which covers more than 8,000 acres in Berkeley and Lacey townships.



**Above:** The leaves of native sassafras trees transform into vibrant hues of orange, yellow, red and purple in the Pinelands each fall. This photograph was captured in Whitesbog Village.



**Above:** Snowy egrets forage in great abundance at the Edwin B. Forysthe National Wildlife Refuge in the Pinelands National Reserve. They sport a wingspan of over three feet and a slender, black bill.

**Photos by Paul Leakan  
NJ Pinelands Commission**