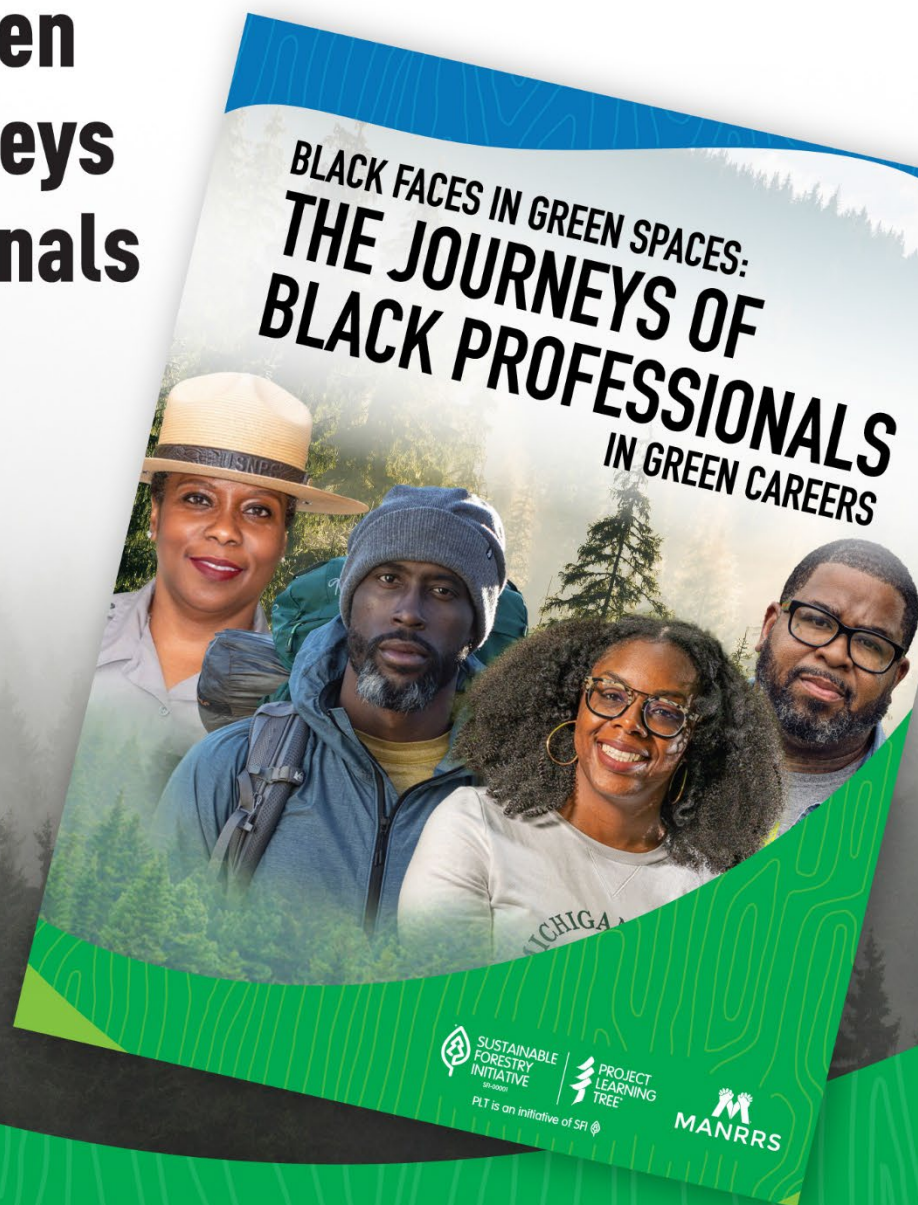


Educator's Toolkit

Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers



PLT is an initiative of SFI 

Introduction

[Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers](#) profiles the career pathways of 22 Black American forest and conservation professionals. It aims to make youth and young professionals aware of and excited about the many jobs in the forest and natural resources sector, advance representation through inspiring stories from historical and current environmental heroes, and highlight the green career opportunities that abound for Black Americans.

The following Journeys Educator's Toolkit is designed to help upper elementary, middle- and high-school educators, as well as college-level career advisors, use Project Learning Tree's *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* with their students. The toolkit may also be helpful for school guidance and career counselors, homeschooling parents, youth group leaders, or informal educators looking to enhance their students' career explorations.

About PLT, SFI, and MANRRS

Project Learning Tree® (PLT) is committed to advancing environmental education, forest stewardship, and green career pathways, using trees and forests as windows on the world. Our award-winning resources offer a lifetime of learning from early childhood through adulthood, and our wide and diverse network provides professional development for educators and opportunities for young people to explore nature and the diversity of green careers in the forest and conservation sector. Together, we are growing future forest and conservation leaders. PLT is an initiative of the Sustainable Forestry Initiative. Learn more at pl.t.org.

The Sustainable Forestry Initiative® (SFI) advances sustainability through forest-focused collaborations. We are an independent, nonprofit organization that leverages four interconnected pillars of work: standards, conservation, community, and education. SFI works with the forest sector, conservation groups, academics, researchers, brand owners, resource professionals, landowners, educators, local communities, Indigenous Peoples, and governments. Collaborating with our network, we leverage SFI-certified forests and products as powerful tools to help solve sustainability challenges such as climate action, conservation of biodiversity, education of future generations, and sustainable economic development. Learn more at forests.org.

Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) is a national society that welcomes the membership of people of all racial and ethnic group participation in agricultural and related science careers. MANRRS's mission is to promote academic and professional advancement by empowering minorities in agriculture, natural resources, and related sciences. Learn more at manrrs.org.

Curriculum Standards Connections

Educators can explore how [Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers](#) activities align to general curriculum standards of learning. The elements in the following chart are based on the Next Generation Science Standards, Common Core State Standards—English Language Arts and C3 Framework for Social Studies.

For alignments between specific PLT resources to national education standards, visit plt.org/alignment-to-standards/national.

Science	English Language Arts	Social Studies	Counseling
<ul style="list-style-type: none"> • Asking questions and defining problems • Obtaining, evaluating, and communicating information 	<ul style="list-style-type: none"> • Writing: research to build and present knowledge • Speaking and listening: comprehension and collaboration 	<ul style="list-style-type: none"> • Developing questions and planning inquiries • Evaluating sources and using evidence • Communicating conclusions and taking informed action 	<ul style="list-style-type: none"> • Long- and short-term academic, career, and social/emotional goals • Ability to identify and overcome barriers

A Note to Toolkit Users

School counselors and advisors often play a crucial role in helping students explore career pathways through individualized mentoring and group guidance lessons. This toolkit provides suggestions for connecting [Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers](#) with other [PLT educational resources](#) to invite students to explore career opportunities in the green jobs sector.

Just as school counseling is student-centered, benefiting students across domains, the suggested activities incorporate academic development, college and career readiness, and social-emotional development. They may be used to enhance engagement, exploration, and experiences around forest careers in a holistic way and to help students assess their own skills and interests. We invite you to use the activities and assessments with individual students or in group lessons, and to adapt them for your particular environment and settings.

Using PLT Resources to Enhance Teaching with *Black Faces in Green Spaces: Journey of Black Professionals in Green Careers*

While [Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers](#) may be used as a stand-alone resource, combining it with other PLT resources and learning activities will enrich students' exploration of forest and conservation careers. We suggest doing the **Getting Started** activity below and then using one or more PLT resources to enhance the learning experience. For each PLT resource, we suggest a sequence of various activities.

Getting Started: What Is a “Green Job”?

1. Use the following questions to introduce the topic of green jobs and to encourage students to think about their own impressions of green jobs:
 - When you think of the term “green job,” what types of jobs do you think fall under that category?
 - What do you think people in green jobs do?
 - Where do you think people who work in green jobs typically work?
 - What types of clothing do you think people who work in green jobs wear?
 - What do you think people working in green jobs look like?

2. Invite students to write their own definition for the term “green jobs.” After students have written their definitions, share the following definition from the U.S. Bureau of Labor Statistics:

Green jobs are jobs that produce goods or services that benefit the environment or conserve natural resources, or jobs that use more environmentally friendly processes or fewer natural resources.

(Source: [Green Jobs Definition, U.S. Bureau of Labor Statistics](#))

3. Lead a group discussion about how we define green jobs, with questions such as:
 - How does your definition of green jobs differ from the “official” definition?
 - How do you think you came up with your definition for green jobs?
 - How have factors such as the media, your parents, gender roles, or history shaped your idea of green jobs?

Summary of Profiles

Use the following summary to help students find profiles in [Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers](#) that align with their specific interests or personalities.

The personality types and STEM skills included here are from the “Your Personality and Green Jobs” and “Ten STEM Skills for Everyone” assessments in [PLT’s Green Jobs: Exploring Forest Careers](#) (see also PLT’s [Find Your Green Job](#) online personality quiz). Note: Urban job settings indicate jobs that are primarily city-based and city-focused.

Name	Page	Job Title	Main Job Setting	Main Personality Type (of job)	Main STEM Skills (of job)
Jasmine Brown	12	Doctoral student, Department of Forestry, Michigan State University	Outdoor	Investigative	Data Analysis, Investigation
Terry Baker	16	CEO, Society of American Foresters	Indoor	Social	Collaboration, Communication, Leadership
Sam Cook	20	Executive Director of Forest Assets, VP of the Natural Resources Foundation	Indoor	Enterprising	Investigation, Leadership, Problem Solving
Alex Singleton	24	Fiber Supply Manager, International Paper	Outdoor	Realistic	Communication, Data Analysis, Problem Solving
Travis Perry	28	Territory Manager, Weyerhaeuser	Indoor	Social	Communication, Organization
Brandi Colander	32	Chair of the Board of Directors, DC Green Bank	Indoor Urban	Enterprising	Creativity, Leadership, Problem Solving
Lydia Kidane	36	Coordinator of Educational Programs, Sustainable Forestry Initiative	Indoor Urban	Conventional	Organization, Creativity, Technology Use
Alex Smith	40	Entrepreneur, Division Street Landscaping	Outdoor Urban	Enterprising	Creativity, Nature-Based Design, Problem Solving
Christopher Davidson	44	Vice President of Sustainability, WestRock	Indoor	Enterprising	Leadership, Nature-Based Design, Problem Solving
Nichole McHenry	48	Relevancy, Diversity and Inclusion Program Manager, National Park Service	Indoor	Social	Communication, Leadership, Organization
Alton Perry	52	Director, Sustainable Forestry and Land Retention Project,	Outdoor	Investigative	Collaboration, Investigation, Technology Use

		Roanoke Electric Cooperative			
Asia Dowtin	56	Assistant Professor of Urban Forestry, Department of Forestry, Michigan State University	Outdoor Urban	Investigative	Data Analysis, Investigation, Organization
Cassius Cash	60	Superintendent, Great Smoky Mountains National Park, National Park Service	Outdoor	Enterprising	Collaboration, Leadership, Problem Solving
Jerri Taylor	64	Director of Diversity in Career Pathways, Sustainable Forestry Initiative	Indoor	Social	Leadership, Collaboration, Problem Solving
J. Drew Lanham	68	Author; Wildlife Biologist; Professor, Clemson University	Outdoor	Investigative	Communication, Investigation
Jason Swann	72	Finance Director, Intermountain West Conservation	Indoor	Conventional	Data Analysis, Leadership, Organization
Leslie Weldon	76	Acting Chief Diversity and Inclusion Officer, USDA Forest Service	Indoor	Social	Communication, Leadership, Problem Solving
Robert Raze	80	Environmental Education Professor, St. Petersburg College of Education	Indoor	Social	Communication, Creativity, Investigation
Beattra Wilson	84	Assistant Director for Urban and Community Forestry, USDA Forest Service	Indoor Urban	Enterprising	Collaboration, Data Analysis, Leadership
Lilian Dinkins	88	PhD Student in Urban Forestry, School of Forestry, Fisheries and Geomatics Sciences, University of Florida	Outdoor Urban	Investigative	Data Analysis, Investigation, Problem Solving
Jenniqua Johnson	92	Urban Connections Coordinator, USDA Forest Services	Indoor Urban	Social	Collaboration, Communication, Creativity
Aaron Evans	96	Chemical, Biological, Radiological, and Nuclear (CBRN) Specialist, United States Army National Guard	Indoor	Investigative	Communication, Data Analysis, Technology Use

Using Journeys Guide Posters

To enhance the use of [*Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers*](#) in schools and other settings, PLT offers a set of digital posters spotlighting the professionals profiled.

Visit [PLT.org/journeys](https://www.plt.org/journeys) to browse the posters and print the digital files.

Some ideas for using the posters with students include:

- Display the posters around the room or in a hallway and tell students that the people featured in the posters all have something in common. Challenge students to look for clues in the photos to guess what that could be. If needed, provide hints to help students discover that all the people depicted are forest and conservation professionals. Ask the students if this is surprising, and if so, why.
- Invite students to do a gallery walk of the posters and consider: What can you tell about each person's job from their photo? Who do you most identify with? Who would you like to know more about? Encourage students to read their profiles in the *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* guide.
- Distribute the posters among students, one per student or pair. Challenge students to use the *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* guide to learn what they can about the person on their poster, including that person's current job, the journey they have taken to get there, the challenges they have faced, and their advice for young people. Have students develop a brief 1-minute introduction of that person and their job to present to the group.

Finding Forestry Professionals

The following is a list of suggested resources for helping to connect students to Black, Indigenous, and People of Color (BIPOC) forestry professionals in their state or community.

Federal agencies in the United States:

- [Bureau of Land Management](#)
- [National Park Service](#)
- [USDA Cooperative Extension Service](#)
- [USDA Forest Service](#)

State, county, and local agencies:

- [Department of Fish and Wildlife](#)
- [Department of Forestry](#)
- [Department of Natural Resources](#)
- [Department of Parks and Recreation](#)
- [Local Nature Conservancy](#) or [Audubon chapters](#)

Professional organizations:

- [500 Women Scientists](#)
- [American Forest and Paper Association](#)
- [Forest Products Association of Canada](#)
- [Minorities in Agriculture, Natural Resources and Related Sciences \(MANRRS\)](#)
- [Society of American Foresters](#)
- [State Forestry Associations](#)

Other networks:

- [SFI Implementation Committees](#)
- [University schools of forestry](#)
- Companies with timberlands or tree farms
- Conservation research organizations
- Forest product manufacturers
- Logging and forest operators

Other support:

- [Learn to Be](#) provides free online one-on-one tutoring to underserved students in a wide range of subjects.
- [Letters to a Pre-Scientist](#) connects students with STEM professionals through a pen pal program.
- [Skype a Scientist](#) enables students to video conference with scientists.

PLT Curricular Materials

Below are explanations and suggestions of the various curricular units we have available for you to use with your students, including:

1. **[Explore Your Environment: K-8 Activity Guide](#)** (for Kindergarten through Grade 8)
2. **[GreenSchools Investigations](#)** (for Grade 2 and above)
3. **[Teaching With i-Tree](#)** (for Grade 7 and above)
4. **[Green Jobs: Exploring Forest Careers](#)** (for Grade 7 and above)

[1.\) Explore Your Environment: K-8 Activity Guide \(for Kindergarten through Grade 8\)](#)

PLT's *Explore Your Environment: K-8 Activity Guide* includes 50 hands-on, multidisciplinary activities to connect children to nature and increase young people's awareness and knowledge about their environment.

In addition to the Guide, [the Explore Your Environment Online Professional Development Course](#) supplements and supports educators in effectively leading activities with youth. This self-paced and interactive online course provides guidance to make the most of the guide, strategies for leading activities outdoors, activity simulations, video demonstrations, reflection questions, and action planning.

We suggest the following sequence of learning activities to combine the *K-8 Activity Guide* with *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers*:

- Introduce a variety of forest-related careers using the activity "My Green Future."
- Lead students in an activity from the guide to give them hands-on experience doing something forest professionals do, such as: "Every Tree for Itself," "Our Federal Forests," "Plant a Tree," "Tree ID," or "Trees in Trouble."
- Choose one or more of the profiles in *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* to read as a group.
- Invite students to discuss with one another about what sounds interesting and what sounds challenging about the person's job.
- Encourage students to choose one forest-related job they would be interested in doing and describe how it is connected to forests.

[2.\) GreenSchools Investigations \(for Grade 2 and above\)](#)

PLT's *GreenSchools Investigations* provides a blueprint for student-led Green Teams to examine their school's energy use, waste and recycling, water consumption, school site, and environmental quality. Complete the accompanying self-paced [GreenSchools online training workshop](#) to learn tips to start a program to green your school, how to obtain equipment and collect data, and ways to empower your students to design and lead action projects in their community.

We suggest the following sequence of learning activities to combine *GreenSchools Investigations* with *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers*:

- Work with students to identify one of the GreenSchools investigations to conduct at your site: “Energy,” “Environmental Quality,” “School Site,” “Waste & Recycling,” or “Water.”
- As students conduct their investigations, explain that they are using hands-on STEM skills that professionals in green careers also use in their work.
- Have students read profiles in *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* related to their investigations. See the Summary of Profiles within the toolkit to help identify related profiles.
- Encourage students to identify what they learned from the profiles that they could apply to their GreenSchools investigations or their own career journeys.
- Invite one or more BIPOC professionals to talk with the group about their career. See Finding BIPOC Professionals in Green Careers within the toolkit for ideas. Encourage students to ask questions specific to their experience as BIPOC individuals.

3.) Teaching With i-Tree (for middle and high school)

PLT’s *Teaching With i-Tree* unit includes three hands-on activities that help middle and high school students discover and analyze the many ecosystem services that trees provide. Students input data they collect into a free online tool that calculates the dollar value of the benefits provided by a tree or set of trees.

We suggest the following sequence of learning activities to combine *Teaching With i-Tree* with *The Journeys of Black Professionals in Green Careers*:

- Explain that i-Tree is a tool that urban foresters use to manage trees and take inventory.
- Introduce students to the free i-Tree app using “Activity 1: Tree Benefits and Identification” and “Activity 2: Tree Value.”
- Ask students to name some careers involved in land management (see the list on pages 23 and 24 of *Teaching With i-Tree* for some possibilities). Have them identify and read profiles in *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* that are related to urban forestry or land management. Encourage them to describe the knowledge and skills these individuals use in their work and the perspective they bring to the land management process.
- Have students roleplay being land managers and create a management plan, using “Activity 3: Land Manager Role Play.”
- Invite students to list the different kinds of jobs that would be needed to carry out their management plan. Have them select one of these jobs and write a job description for it, including the duties and responsibilities, the education requirements, experiences, and skills that would be required to do the job well.

4.) *Green Jobs: Exploring Forest Careers* (for middle and high school)

PLT's *Green Jobs: Exploring Forest Careers* unit includes four hands-on, NGSS-aligned, instructional activities to help youth research forestry jobs and practice managing and monitoring forest resources.

[The Green Jobs Online Professional Development Course](#) supplements the guide and supports educators in leading the activities to explore green jobs with young people. The self-paced, interactive online course provides curated videos to expand and deepen your knowledge of forest and conservation jobs, as well as teaching tips and resources to help modify the activities to meet your setting and youth needs.

We suggest the following sequence of learning activities to combine *Green Jobs: Exploring Forest Careers* with *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers*:

- Introduce forest careers using the activity “Who Works in this Forest?”
- Invite students to take PLT's [Find Your Green Job](#) online personality quiz or the “Ten STEM Skills for Everyone” assessment on pages 16-17 of the guide.
- Help students use their results from the quiz and/or assessment and the Synopsis of Profiles box to identify two or more profiles to examine.
- Invite students to work in pairs or groups to summarize the profiles they examined and talk about how they could apply what they learned to their own journeys.
- Have students conduct an informational interview with a professional in a green career, using the worksheet “Exploring Green Jobs” on page 131. Invite them to add additional questions specifically related to the person’s experience as a BIPOC individual. See Finding BIPOC Professionals in Green Careers within the toolkit for more ideas.
- Encourage students to create a career card, like the ones on pages 27-30 of the guide, highlighting a green job that interests them. Challenge them to be creative in coming up with their career card. You might give them examples to get them thinking outside of the box, such as a sustainable fashion designer, an ecological game developer, or a harvester mechanic.

Resources

Read more about Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers

Stay updated about the release of *Black Faces in Green Spaces: The Journeys of Black Professionals in Green Careers* and accompanying resources, including:



- Downloadable job training
- Mentorship opportunities
- Access to networking webinars
- Invitations to local events

SCAN the QR code or visit plt.org/journeys to learn more

Explore SAF-accredited professional degree programs

Professional degree programs accredited through the Society of American Foresters (SAF) throughout the United States can help you pursue a career in forestry and conservation with a program that meets the standards set by the profession.

SCAN the QR code or visit eforester.org to learn more.



Find a MANRRS Chapter near you

Explore a MANRRS Chapter in your state and discover career opportunities for you in forestry and conservation. SCAN the QR code or visit manrrs.org to learn more.



Discover the Junior MANRRS Program, designed to inspire students in grades 7–12 to pursue a career in the science, technology, engineering, agricultural, and mathematics fields, or STEAM. Visit manrrs.org/junior-manrrs-membership to learn more.

Teaching materials for high schools

For high school educators, PLT's secondary modules challenge students to explore facts about environmental issues in-depth. Hands-on classroom studies, research, and collaborative field investigations provide students with opportunities to debate issues and engage with experts. PLT's secondary modules include Southeastern Forests and Climate Change, Focus on Forests, Forests of the World, and Places We Live.

Learn more at plt.org/curriculum-offerings/high-school.

E-units for grades K–2, 3–5, and 6–8

PLT's award-winning e-units include step-by-step lesson plans and multi-disciplinary, hands-on activities constructed around NGSS, aligned to Common Core State Standards and the C3 Framework for Social Studies. They incorporate background information, downloadable student pages, assessment tools and rubrics, links to supplementary resources, and more! PLT currently offers three e-units: Tremendous Science! for grades K–2, Energy in Ecosystems for grades 3–5, and Carbon & Climate for grades 6–8.

Learn more at plt.org/online-environmental-education-units.

Trees & Me: Activities for exploring nature with young children

This guide contains hundreds of ideas for fun, easy-to-do, hands-on experiences to connect children ages 1–6 to nature. They are organized around 12 themes and include ideas for age-appropriate career exploration as well as art, dramatic play, outdoor play, music and movement, reading and writing, woodworking, and snacks.

Learn more at plt.org/curriculum/preschool-learning-experiences-trees-nature.

Attend a professional development workshop

Receive PLT's instructional materials, earn continuing education credits, learn new teaching skills, and become more comfortable teaching outdoors by attending a PLT professional development workshop. PLT offers both online courses and in-person workshops tailored to specific grade levels, topics, and teaching situations.

Learn more at plt.org/trainings.

Connect children to nature

Encouraging children to spend time outside and play in nature can improve their creativity and imagination, classroom performance, and academic achievement as well as their overall health and fitness. PLT's fun and easy-to-do Nature Activities for Families can be used while exploring your own backyard, visiting a local park, or walking in the woods—as well as indoors! Families have a lot of influence over children's career decisions, and the younger we can guide them and help them explore different interests and opportunities, the better.

Learn more at plt.org/activities-for-families.

Stay connected to PLT through The Branch

PLT's newsletter, The Branch, features environmental education resources, green career pathway support, lesson plans, grant opportunities, and tips from educators for teaching about the environment and forest literacy in the classroom and outdoors.

Sign up for updates at plt.org/signup.