Environmental Career Resources

Aquarium Curator and Herpetologist video from National Aquarium and Kids.gov

http://kids.usa.gov/watch-videos/jobs/aquarium/index.shtml

Arboriculture Career Paths from the International Society of Arboriculture

http://www.isa-arbor.com/students/careersInArboriculture/commonCareerPaths.aspx, with job

descriptions for <u>Municipal Arborist/Forester</u>, <u>Utility Arborist/Forester</u>, and <u>Urban Forester/Government</u> and a video https://youtu.be/u8Qn1iAMISI

Conservation Connect outdoor career videos from US Fish and Wildlife Service http://nctc.fws.gov/conservationconnect/

Geoscience Career Videos from National Ground Water Association:

"Groundwater Careers" https://www.youtube.com/watch?v=yUgl1QjuPHs and

"Groundwater is Cool" https://www.youtube.com/watch?v=ZZ7K50O6z5g

Marine Biologist Career Spotlight video from Smithsonian and Kids.gov

http://kids.usa.gov/watch-videos/jobs/marine-biologist/index.shtml

Oil and Gas "Careers in Ohio" from Ohio Oil and Gas Energy Education Project

http://oogeep.org/industry-workforce/careers/ or email acroce@oogeep.org to order free copies

River Careers profiles from RiverWorks Discovery

http://www.riverworksdiscovery.org/river-careers/

Scientists at the Smithsonian, includes Amphibian Ace, Bat Listener, Bee Tracker, Bird Strike Sleuth,

Germinator, Reef Doctor, Seed Reader and many more

http://www.smithsonianeducation.org/scientist/index.html

Scientists Card series from Natural Inquirer middle school science education

http://www.naturalinguirer.org/scientists-v-92.html

US Environmental Protection Agency "Faces of the EPA" video interviews

https://www.youtube.com/playlist?list=PLBhfkkujnoRD-7H1IYa5FQ10AFgsjbnlh

US Geological Survey Career Cards for ten different science careers including biological science technician, biologist, cartographer, chemist, ecologist, geologist, geographer, hydrologic technician, hydrologist, physical scientist, http://education.usgs.gov/careercards.html

Wildlife Biologist Career Spotlight video from US Fish and Wildlife Service & Kids.gov

http://kids.usa.gov/watch-videos/jobs/wildlife-biologist/index.shtml

Wildlife Officer Career Spotlight video from US Fish and Wildlife Service & Kids.gov

http://kids.usa.gov/watch-videos/jobs/federal-wildlife-officer/index.shtml

Zoo Keepers from the National Zoo and Kids.gov

http://kids.usa.gov/watch-videos/jobs/zoo-keepers/index.shtml

"My Future Life" videos, http://www.youtube.com/user/SEOCEMS with career interviews such as Aquatic Biologist, Hydrogeologist, Environmental Projects Manager, Plant Pathologist, Wind Energy Assessment, and Waste Management

Career Pathways from the Ohio Department of Education, showing middle, high school and college course options for various career clusters

https://education.ohio.gov/Topics/Career-Tech/Career-Connections/Career-Pathways

Four of these environmental career pathways have been posted as an "Ohio In-Demand Job" on the **Ohio Means Jobs** website:

Water plant operator/utilities director

http://jfs.ohio.gov/owd/CareerPathways/AgSystemsWaterSystems.stm

Environmental Technician/Environmental Specialist/Natural Sciences Manager

http://jfs.ohio.gov/owd/CareerPathways/AgSystemsEnvironmental.stm

Arborist/Forestry Specialist/Forestry Manager

http://omj.ohio.gov/WorkArea/DownloadAsset.aspx?id=2147644425

Pipeline Technician/Petroleum Technician/Petroleum Engineer

http://jfs.ohio.gov/owd/careerpathways/agsystemsnaturalresources.stm

Ohio Means Jobs K-12 Occupation Search page for beginning to research different career fields: https://jobseeker.k-12.ohiomeansjobs.monster.com/ExploreIt/OccupationSearch.aspx

Open Education Database http://oedb.org/, select a degree then "science and engineering" category to reveal subjects like environmental policy and environmental science.

Posters showcasing careers and strong employment outlooks for environmental professionals, from the National Environmental Education Foundation:

"STEM and Our Planet" www.neefusa.org/resource/stem-our-planet-infographic

"Engineering and Our Planet" www.neefusa.org/resource/engineering-our-planet-infographic

"Rooted in Math" www.neefusa.org/resource/rooted-math poster, and https://www.neefusa.org/resource/rooted-math-educator-toolkit

Classroom Activities on Environmental Careers

Environmental Careers Icebreaker Classroom Activity created by Ohio EPA Office of Environmental Education to showcase 52 different public sector and private sector careers http://epa.ohio.gov/oee/EnvironmentalEducation.aspx#135377996-environmental-education-resources

"**Urban Waters**" activity in the *Project WET Curriculum and Activity Guide 2.0* includes water career cards for 19 careers related to providing and treating drinking water, and treating waste water.

"Who Works in This Forest?" activity in Project Learning Tree Pre K-8 Environmental Education Activity Guide

"Working for Wildlife" activity in newest *Project Wild Aquatic Guide*, and accompanying online Project WILD: Wild Work Resources, http://www.projectwild.org/projectwildwebsite/resources/occupations.htm

Environmental Career Resources Available for Purchase

Environmental Related Occupations two- volume Career Pathway DVD available from www.careerpathwaysonline.com includes video interviews of Ohio and West Virginia environmental professionals about their careers, education and salary in the following fields:

Air Quality Manager

Solid Waste Manager

Hazardous Waste Manager

Urban and Regional Planner

Forest and Conservation Scientist

Water and Wastewater Treatment Plant Operator

Geologist

Meteorologist

Park Ranger

Biological Scientist

Environmental Inspector

Recycling Plant Manager

Scientists in the Field series of books from Houghton Mifflin Harcourt:

The Bat Scientists by Mary Cay Carson, c. 2010

Emi and the Rhino Scientist by Mary Kay Carson, c. 2010

Extreme Scientists: Exploring Nature's Mysteries from Perilous Places by Donna M. Jackson, c. 2009

The Frog Scientist by Pamela S. Turner, c. 2009

Gorilla Doctors: Saving Endangered Great Apes by Pamela S. Turner, c 2005 Hidden Worlds: Looking Through a Scientist's Microscope by Stephen Kramer, c. 2001

The Hive Detectives: Chronicle of a Honey Bee Catastrophe by Loree Griffin Burns, c. 2010

The Manatee Scientists: Saving Vulnerable Species by Peter Lourie, c. 2011

Once a Wolf: How Wildlife Biologists Fought to Bring Back the Gray Wolf by Stephen R.

Swinburne, c. 1999

Park Scientists: Gila Monsters, Geysers and Grizzly Bears in America's Own Backyard by Tom

Uhlman and Mary Kay Carson, c. 2014

The Polar Bear Scientists by Peter Lourie, c. 2012

The Prairie Builders: Reconstructing America's Lost Grasslands by Sneed Collard III, c. 2008

Project UltraSwan by Elinor Osborn, c. 2002

Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea, by Sy Montgomery, c. 2006

Saving the Ghost of the Mountain: An Expedition Among Snow Leopards in Mongolia by Sy Montgomery, c. 2009

Science Warriors: The Battle Against Invasive Species by Sneed B. Collard III, c. 2008

Secrets of Sound: Studying the Calls and Songs of Whales, Elephants and Birds by April Pulley Sayre, c. 2002

The Snake Scientist by Sy Montgomery, C. 1999

Stronger than Steel: Spider Silk DNA and the Quest for Better Bulletproof Vests, Sutures, and

Parachute Rope by Bridget Heos, c. 2013

The Tarantula Scientist by Sy Montgomery, c. 2007

Tracking Trash: Flotsam, Jetsam and the Science of Ocean Motion by Loree Griffin Burns, c. 2007

The Whale Scientists: Solving the Mystery of Whale Strandings, by Fran Hodgkins, c. 2007
The Wildlife Detectives: How Forensic Scientists Fight Crimes Against Nature, by Donna M. Jackson, c. 2000

The Woods Scientist by Stephen R. Swinburne, c. 2002

General Career Resources

Ohio Career Exploration Internship Program at the Ohio Development Services Agency places high school students in businesses for 20-week paid internships. Online application at http://development.ohio.gov/bs/bs_oceip.htm

Occupational Outlook Handbook from the US Bureau of Labor Statistics

http://www.bls.gov/ooh/home.htm includes in-depth job descriptions, degree requirements, pay and job outlook for a number of environmental careers, including:

Atmospheric Scientists Epidemiologists
Biological Technicians Geoscientists

Civil Engineers Hazmat Removal Workers

Conservation Scientists and Foresters Hydrologists
Environmental Engineering Technicians Microbiologists

Environmental Engineers Occupational Health & Safety Specialists

Environmental Science Technicians Wildlife Biologists

Environmental Scientists and Specialists Zoologists

See also the Bureau of Labor Statistics K-12 website, http://www.bls.gov/k12/

Please send updates and corrections to: Ohio EPA, Office of Environmental Education oeef@epa.ohio.gov