

= Leonard Harrison State Park =

Leonard Harrison State Park is a 585 @-@ acre ( 237 ha ) Pennsylvania state park in Tioga County , Pennsylvania , in the United States . It is on the east rim of the Pine Creek Gorge , also known as the Grand Canyon of Pennsylvania , which is 800 feet ( 240 m ) deep and nearly 4 @,@ 000 feet ( 1 @,@ 200 m ) across here . It also serves as headquarters for the adjoining Colton Point State Park , its sister park on the west rim of the gorge . Leonard Harrison State Park is known for its views of the Pine Creek Gorge , and offers hiking , fishing and hunting , whitewater boating , and camping . The park is in Shippen and Delmar Townships , 10 miles ( 16 km ) west of Wellsboro at the western terminus of Pennsylvania Route 660 .

Pine Creek flows through the park and has carved the gorge through five major rock formations from the Devonian and Carboniferous periods . Native Americans once used the Pine Creek Path along the creek . The path was later used by lumbermen , and then became the course of a railroad from 1883 to 1888 . Since 1996 , the 63 @.@ 4 @-@ mile ( 102 @.@ 0 km ) Pine Creek Rail Trail has followed the creek through the park . The Pine Creek Gorge was named a National Natural Landmark in 1968 and is also protected as a Pennsylvania State Natural Area and Important Bird Area , while Pine Creek is a Pennsylvania Scenic and Wild River . The gorge is home to many species of plants and animals , some of which have been reintroduced to the area .

Although the Pine Creek Gorge was clearcut in the 19th and early 20th centuries , it is now covered by second growth forest , thanks in part to the conservation efforts of the Civilian Conservation Corps ( CCC ) in the 1930s . The park is named for Leonard Harrison , a Wellsboro lumberman who cut the timber there , then established the park , which he donated to the state in 1922 . The CCC improved the park and built many of its original facilities . Since a successful publicity campaign in 1936 , the park has been a popular tourist destination and attracts hundreds of thousands of visitors each year . Leonard Harrison State Park was chosen by the Pennsylvania Department of Conservation and Natural Resources ( DCNR ) Bureau of Parks for its " 25 Must @-@ See Pennsylvania State Parks " list , which praised its " spectacular vistas and a fabulous view of Pine Creek Gorge , also known as Pennsylvania 's Grand Canyon " .

= = History = =

= = = Native Americans = = =

Humans have lived in what is now Pennsylvania since at least 10 @,@ 000 BC . The first settlers were Paleo @-@ Indian nomadic hunters known from their stone tools . The hunter @-@ gatherers of the Archaic period , which lasted locally from 7000 to 1000 BC , used a greater variety of more sophisticated stone artifacts . The Woodland period marked the gradual transition to semi @-@ permanent villages and horticulture , between 1000 BC and 1500 AD . Archeological evidence found in the state from this time includes a range of pottery types and styles , burial mounds , pipes , bows and arrows , and ornaments .

Leonard Harrison State Park is in the West Branch Susquehanna River drainage basin , the earliest recorded inhabitants of which were the Iroquoian @-@ speaking Susquehannocks . They were a matriarchal society that lived in stockaded villages of large long houses , and " occasionally inhabited " the mountains surrounding the Pine Creek Gorge . Their numbers were greatly reduced by disease and warfare with the Five Nations of the Iroquois , and by 1675 they had died out , moved away , or been assimilated into other tribes .

After this , the lands of the West Branch Susquehanna River valley were under the nominal control of the Iroquois . The Iroquois lived in long houses , primarily in what is now New York , and had a strong confederacy which gave them power beyond their numbers . They and other tribes used the Pine Creek Path through the gorge , traveling between a path on the Genesee River in modern New York in the north , and the Great Shamokin Path along the West Branch Susquehanna River in the south . The Seneca tribe of the Iroquois believed that Pine Creek Gorge was sacred land and never

established a permanent settlement there . They used the path through the gorge and had seasonal hunting camps along it , including one just north of the park near what is now the village of Ansonia . To fill the void left by the demise of the Susquehannocks , the Iroquois encouraged displaced tribes from the east to settle in the West Branch watershed , including the Shawnee and Lenape ( or Delaware ) .

The French and Indian War ( 1754 ? 1763 ) led to the migration of many Native Americans westward to the Ohio River basin . On November 5 , 1768 , the British acquired the New Purchase from the Iroquois in the Treaty of Fort Stanwix , including what is now Leonard Harrison State Park . The Purchase line established by this treaty was disputed , as it was unclear whether the border along " Tiadaghton Creek " referred to present @-@ day Pine Creek or to Lycoming Creek , further to the east . As a result , the land between them was disputed territory until 1784 and the Second Treaty of Fort Stanwix . After the American Revolutionary War , Native Americans almost entirely left Pennsylvania , although some isolated bands of Natives remained in Pine Creek Gorge until the War of 1812 .

= = = Lumber era = = =

Prior to the arrival of William Penn and his Quaker colonists in 1682 , up to 90 percent of what is now Pennsylvania was covered with woods : more than 31 @,@ 000 square miles ( 80 @,@ 000 km<sup>2</sup> ) of eastern white pine , eastern hemlock , and a mix of hardwoods . The forests near the three original counties , Philadelphia , Bucks , and Chester , were the first to be harvested , as the early settlers used the readily available timber to build homes , barns , and ships , and cleared the land for agriculture . The demand for wood products slowly increased and by the time of the American Revolution the lumber industry had reached the interior and mountainous regions of Pennsylvania . Lumber thus became one of the leading industries in Pennsylvania . Trees were used to furnish fuel to heat homes , tannin for the many tanneries that were spread throughout the state , and wood for construction , furniture , and barrel making . Large areas of forest were harvested by colliers to fire iron furnaces . Rifle stocks and shingles were made from Pennsylvania timber , as were a wide variety of household utensils , and the first Conestoga wagons .

By the early 19th century the demand for lumber reached the Pine Creek Gorge , where the surrounding mountainsides were covered with eastern white pine 3 to 6 feet ( 0 @.@ 9 to 1 @.@ 8 m ) in diameter and 150 feet ( 46 m ) or more tall , eastern hemlock 9 feet ( 2 @.@ 7 m ) in circumference , and huge hardwoods . Each acre ( 0 @.@ 4 ha ) of these virgin forests produced 100 @,@ 000 board feet ( 236 m<sup>3</sup> ) of white pine and 200 @,@ 000 board feet ( 472 m<sup>3</sup> ) of hemlock and hardwoods . For comparison , the same area of forest today produces a total of only 5 @,@ 000 board feet ( 11 @.@ 8 m<sup>3</sup> ) on average . According to Steven E. Owlett , environmental lawyer and author , shipbuilders considered pine from Pine Creek the " best timber in the world for making fine ship masts " , so it was the first lumber to be harvested on a large scale . Pine Creek was declared a public highway by the Pennsylvania General Assembly on March 16 , 1798 , and rafts of spars were floated down the creek to the Susquehanna River , then to the Chesapeake Bay and the shipbuilders at Baltimore . The lumbermen would then walk home , following the old Pine Creek Path at the end of their journey . A spar sold for one dollar and three spars up to 90 feet ( 27 m ) long were lashed together to make a ship 's mast . The largest spar produced on Pine Creek was 43 inches ( 110 cm ) in diameter 12 feet ( 3 @.@ 7 m ) above the base , 93 feet ( 28 m ) long , and 33 inches ( 84 cm ) in diameter at the top . By 1840 , Tioga County alone produced over 452 such spar rafts with more than 22 @,@ 000 @,@ 000 board feet ( 52 @,@ 000 m<sup>3</sup> ) of lumber .

As the 19th century progressed , fewer pines were left and more hemlocks and hardwoods were cut and processed locally . By 1810 there were 11 sawmills in the Pine Creek watershed , and by 1840 there were 145 , despite a flood in 1832 which wiped out nearly all the mills along the creek . Selective harvesting of pines was replaced by clearcutting of all lumber in a tract . The first lumbering activity to take place close to what is now Leonard Harrison State Park occurred in 1838 when William Dodge and some partners built a settlement at Big Meadows and formed the Pennsylvania Joint Land and Lumber Company . Dodge 's company purchased thousands of acres

of land in the area , including what is now Colton Point State Park . In 1865 the last pine spar raft floated down the creek , and on March 28 , 1871 the General Assembly passed a law allowing splash dam construction and clearing of creeks to allow loose logs to float better . The earliest spring log drives floated up to 20 @, @ 000 @, @ 000 board feet ( 47 @, @ 000 m3 ) of logs in Pine Creek at one time . These logs floated to the West Branch Susquehanna River and to sawmills near the Susquehanna Boom at Williamsport . Hemlock wood was not widely used until the advent of wire nails , but the bark was used to tan leather . After 1870 the largest tanneries in the world were in the Pine Creek watershed , and required 2 @, @ 000 pounds ( 910 kg ) of bark to produce 150 pounds ( 68 kg ) of quality sole leather .

In 1883 the Jersey Shore , Pine Creek and Buffalo Railway opened , following the creek through the gorge . The new railroad used the relatively level route along Pine Creek to link the New York Central Railroad with the Clearfield Coalfield . In the surrounding forests , log drives gave way to logging railroads , which transported lumber to local sawmills . There were 13 companies operating logging railroads along Pine Creek and its tributaries between 1886 and 1921 , while the last log drive in the Pine Creek watershed started on Little Pine Creek in 1905 . The west rim , which became Colton Point State Park , had a logging railroad by 1903 , which was able to harvest lumber on Fourmile Run that had been previously inaccessible . The old @-@ growth forests were clearcut by the early 20th century and the gorge was stripped bare . Nothing was left except the dried @-@ out tree tops , which became a fire hazard , so much of the land burned and was left barren . On May 6 , 1903 the Wellsboro newspaper had the headline " Wild Lands Aflame " and reported landslides through the gorge . The soil was depleted of nutrients , fires baked the ground hard , and jungles of blueberries , blackberries , and mountain laurel covered the clearcut land , which became known as the " Pennsylvania Desert " . Disastrous floods swept the area periodically and much of the wildlife was wiped out .

= = = Nessmuk and Leonard Harrison = = =

George Washington Sears , an early conservationist who wrote under the pen name " Nessmuk " , was one of the first to criticize Pennsylvania lumbering and its destruction of forests and creeks . In his 1884 book Woodcraft he wrote of the Pine Creek watershed where

A huge tannery ... poisons and blackens the stream with chemicals , bark and ooze . ... The once fine covers and thickets are converted into fields thickly dotted with blackened stumps . And , to crown the desolation , heavy laden trains of ' The Pine Creek and Jersey Shore R.R. ' go thundering [ by ] almost hourly ... Of course , this is progress ; but , whether backward or forward , had better be decided sixty years hence .

Nessmuk 's words went mostly unheeded in his lifetime and did not prevent the clearcutting of almost all of the virgin forests in Pennsylvania .

Sears lived in Wellsboro from 1844 until his death in 1890 , and was the first to describe the Pine Creek Gorge . He also described a trip to what became Leonard Harrison State Park : after a 6 @-@ mile ( 9 @. @ 7 km ) buggy ride , he then had to hike 7 miles ( 11 km ) through tangles of fallen trees and branches , down ravines , and over banks for five hours . At least he reached " The Point " , which he wrote was " the jutting terminus of a high ridge which not only commands a capital view of the opposite mountain , but also of the Pine Creek Valley , up and down for miles " . A Pennsylvania Historical and Museum Commission ( PHMC ) state historical marker commemorating Nessmuk was dedicated in the park in 1972 .

The creation of the park was the work of Leonard Harrison , a former lumberman and businessman from Wellsboro who owned a substantial amount of land in the Pine Creek Gorge . In the 1890s Harrison operated a sawmill at Tiadaghton in the middle of the gorge , which was supplied with logs , not by train as was most common in that era , but by a log slide built into the side of the gorge . The log slide was used on a year @-@ round basis : during the winter the logs slid down on ice ; following the snowmelt the slide was greased to ease the descent of the logs . After the village and the mill were destroyed by a fire , Harrison turned his attention to tourism . He purchased 121 acres ( 49 ha ) of land at the site of the current park in 1906 , then developed this land , known as " The

Lookout " , and invited the public to enjoy the beauty of Pine Creek Gorge . Harrison donated the picnic grounds to the Commonwealth of Pennsylvania in 1922 .

Although the park was donated to the state , the Wellsboro Chamber of Commerce made initial improvements there and operated it for the first two decades . Elsewhere in the gorge the state bought land abandoned by lumber companies , sometimes for less than \$ 2 per acre ( \$ 5 per ha ) . Except for the adjoining Colton Point State Park , this land became the Tioga State Forest , which was officially established in 1925 and lies just north and south of the park . As of 2008 the state forest encompasses 160 @, @ 000 acres ( 65 @, @ 000 ha ) , mostly in Tioga County .

= = = Modern era = = =

Despite its status as Leonard Harrison State Forest Park , it took time for the park to become more well known . Access to the park over small roads was still difficult . An elderly woman who had lived nearby all her life visited the park for the first time in 1932 and asked , on seeing the gorge , " How long has this been here ? "

The Civilian Conservation Corps ( CCC ) improved access and constructed many of the amenities at Leonard Harrison park from 1933 to 1936 , during the Great Depression . Leonard Harrison State Park is one of many examples of the work of the CCC throughout north @-@ central Pennsylvania . The CCC built picnic and comfort facilities , made roads and trails ( often following old logging roads ) , and planted stands of white pine , spruce and larch . Some of the CCC @-@ constructed facilities remain and are still used , and the park has hosted a reunion of former CCC workers each summer since 1990 .

In 1936 Larry Woodin of Wellsboro and other Tioga County business owners began a tourism campaign to promote the Pine Creek Gorge as " The Grand Canyon of Pennsylvania " . Greyhound Bus Lines featured a view of the canyon from a Leonard Harrison lookout on the back cover of its Atlantic Coast timetable . The bus line 's Chicago to New York City tour had an overnight stay in Wellsboro and a morning visit to the canyon for \$ 3 . More than 300 @, @ 000 tourists visited the canyon by the autumn of 1936 , and 15 @, @ 000 visited Leonard Harrison over Memorial Day weekend in 1937 . That year more visitors came to the Pine Creek Gorge than to Yellowstone National Park . In response to the heavy use of the local roads , the CCC widened the highways in the area , and guides from the CCC gave tours of the canyon . A PHMC state historical marker honoring the CCC 's work in the park and county was dedicated on June 3 , 1995 . Near the lookout over the gorge there is a bronze statue of a " Tioga County CCC Worker " , unveiled on August 14 , 1999 , as a monument to the achievements of the CCC .

After the Second World War the state took over operation of the park , and expanded its size beyond the original land donated by Harrison : six purchases between 1946 and 1949 increased the park 's area from 128 acres ( 52 ha ) to 585 acres ( 237 ha ) at a cost of \$ 26 @, @ 328 . The Pennsylvania Geographic Board dropped the word Forest and officially named it Leonard Harrison State Park on November 11 , 1954 . The park was improved in the following decade with the completion of new latrines ( 1963 ) and a new concession stand and visitor center ( 1968 ) . Pine Creek was named a state scenic river on December 4 , 1992 , which ensured further protection of Pine Creek Gorge in its natural state . In 1997 the park 's Important Bird Area ( IBA ) was one of the first 73 IBAs established in Pennsylvania . In 2000 the park became part of the Hills Creek State Park complex , an administrative grouping of eight state parks in Potter and Tioga counties . In 2005 the state began a \$ 1 @. @ 2 million upgrade of park facilities , including a new maintenance building , the replacement of three pit latrines at the overlook and campground , the addition of showers at the campground , and the conversion of all restrooms to flush toilets .

The second half of the 20th century saw great changes in the rail line through the park . Regular passenger service on the canyon line ended after the Second World War , and in 1960 the second set of train tracks was removed . Conrail abandoned the section of the railroad passing through the gorge on September 21 , 1988 . The right @-@ of @-@ way eventually became the Pine Creek Rail Trail , which follows the path of the former Pine Creek Path . The first section of the rail trail opened in 1996 and included the 1 mile ( 1 @. @ 6 km ) section in the park : as of 2008 the Pine Creek Rail

Trail is 63 @. @ 5 miles ( 102 @. @ 2 km ) long .

Leonard Harrison State Park continued to attract national attention in the post @-@ war era . The New York Times featured the park and its " breath @-@ taking views of the gorge " as well as its trails and picnic groves in a 1950 article , and in 1966 praised the whitewater boating on Pine Creek and the park 's " outstanding look @-@ out points " . The Pine Creek Gorge , including Leonard Harrison and Colton Point State Parks and a 12 @-@ mile ( 19 km ) section of Tioga State Forest , was named a National Natural Landmark ( NNL ) in April 1968 . The plaque for the entire NNL is on the lookout terrace of Leonard Harrison State Park . Another New York Times article on whitewater canoeing in 1973 noted the damage along the creek done by Hurricane Agnes the year before , and Leonard Harrison 's waterfalls .

In the new millennium , the two state parks on either side of the Pine Creek Gorge are frequently treated as one . A 2002 New York Times article called Leonard Harrison and Colton Point state parks " Two State Parks , Divided by a Canyon " and noted their " overlooks offer the most spectacular views " . Leonard Harrison and Colton Point were each included in the list of state parks chosen by the DCNR Pennsylvania Bureau of Parks for its " 25 Must @-@ See Pennsylvania State Parks " list . The DCNR describes how they " offer spectacular vistas and a fabulous view of Pine Creek Gorge , also known as Pennsylvania 's Grand Canyon " . It goes on to praise their inclusion in a National Natural Landmark and State Park Natural Area , hiking and trails , and the Pine Creek Rail Trail and bicycling .

= = Pine Creek Gorge = =

Leonard Harrison State Park lies on the east side of the Pine Creek Gorge , also known as the Grand Canyon of Pennsylvania . A sister park , Colton Point State Park , is on the west side , and the two parks combined form essentially one large park that includes parts of the gorge and creek and parts of the plateau dissected by the gorge . Pine Creek has carved the gorge nearly 47 miles ( 76 km ) through the dissected Allegheny Plateau in northcentral Pennsylvania . The canyon begins in southwestern Tioga County , just south of the village of Ansonia , and continues south to near the village of Waterville in Lycoming County . The depth of the gorge in Colton Point State Park is about 800 feet ( 240 m ) and it measures nearly 4 @, @ 000 feet ( 1 @, @ 200 m ) across .

The Pine Creek Gorge National Natural Landmark includes Colton Point and Leonard Harrison State Parks and parts of the Tioga State Forest along 12 miles ( 19 km ) of Pine Creek between Ansonia and Blackwell . This federal program does not provide any extra protection beyond that offered by the land owner . The National Park Service 's designation of the gorge as a National Natural Landmark notes that it " contains superlative scenery , geological and ecological value , and is one of the finest examples of a deep gorge in the eastern United States . "

The gorge is also protected by the state of Pennsylvania as the 12 @, @ 163 @-@ acre ( 4 @, @ 922 ha ) Pine Creek Gorge Natural Area , which is the second largest State Natural Area in Pennsylvania . Within this area , 699 acres ( 283 ha ) of Colton Point and Leonard Harrison State Parks are designated a State Park Natural Area . The state Natural Area runs along Pine Creek from Darling Run in the north ( just below Ansonia ) to Jerry Run in the south ( just above Blackwell ) . It is approximately 12 miles ( 19 km ) long and 2 miles ( 3 @. @ 2 km ) wide , with state forest roads providing all of the western border and part of the eastern border .

Within the park , Pine Creek and the walls of the gorge " visible from the opposite shoreline " are also protected by the state as a Pennsylvania Scenic River . In 1968 Pine Creek was one of only 27 rivers originally designated as eligible to be included in the National Wild and Scenic River system , and one of only eight specifically mentioned in the law establishing the program . Before Pine Creek could be included in the federal program , the state enacted its State Scenic Rivers Act , then asked that Pine Creek be withdrawn from the national designation . However , there was much local opposition to its inclusion on the state 's list , based at least partly on mistaken fears that protection would involve seizure of private property and restricted access . Eventually this opposition was overcome , but Pennsylvania did not officially include it as one of its own state Scenic and Wild Rivers until November 25 , 1992 . The state treated Pine Creek as if it were a state scenic river

between 1968 and 1992 . It protected the creek from dam @-@ building and water withdrawals for power plants , and added public access points to reduce abuse of private property .

= = Geology and climate = =

Although the rock formations exposed in Leonard Harrison State Park and the Pine Creek Gorge are at least 300 million years old , the gorge itself formed only about 20 @,@ 000 years ago , in the last ice age . Pine Creek had flowed northeasterly until then , but was dammed by rocks , soil , ice , and other debris deposited by the receding Laurentide Continental Glacier . The dammed creek formed a lake near the present village of Ansonia , and the lake 's glacial meltwater overflowed the debris dam , which caused a reversal of the flow of Pine Creek . The creek flooded to the south and quickly carved a deep channel on its way to the West Branch Susquehanna River .

The park is at an elevation of 1 @,@ 821 feet ( 555 m ) on the Allegheny Plateau , which formed in the Alleghenian orogeny some 300 million years ago , when Gondwana ( specifically what became Africa ) and what became North America collided , forming Pangaea . While the gorge and its surroundings appear mountainous , these are not true mountains : instead years of erosion have made this a dissected plateau , causing the " mountainous " terrain seen today . The hardest of the ancient rocks are on top of the ridges , while the softer rocks eroded away forming the valleys .

The land on which Leonard Harrison State Park sits has undergone tremendous change over the last 400 million years . It was once part of the coastline of a shallow sea that covered a great portion of what is now North America . The high mountains to the east of the sea gradually eroded , causing a buildup of sediment made up primarily of clay , sand and gravel . Tremendous pressure on the sediment caused the formation of the rocks that are found today in the Pine Creek drainage basin : sandstone , shale , conglomerates , limestone , and coal .

Five major rock formations are present in Leonard Harrison State Park , from the Devonian and Carboniferous periods . The youngest of these , which forms the highest points in the park and along the gorge , is the early Pennsylvanian Pottsville Formation , a gray conglomerate that may contain sandstone , siltstone , and shale , as well as anthracite coal . Low @-@ sulfur coal was once mined at three locations within the Pine Creek watershed . Below this is the late Mississippian Mauch Chunk Formation , which is formed with grayish @-@ red shale , siltstone , sandstone , and conglomerate . Millstones were once carved from the exposed sections of this conglomerate . Together the Pottsville and Mauch Chunk formations are some 300 feet ( 91 m ) thick .

Next below these is the late Devonian and early Mississippian Huntley Mountain Formation , which is made of grayish @-@ red shale and olive @-@ gray sandstone . This is relatively hard rock and forms many of the ridges . Below this is the red shale and siltstone of the Catskill Formation , about 760 feet ( 230 m ) thick and some 375 million years old . This layer is relatively soft and easily eroded , which helped to form the Pine Creek Gorge . Cliffs formed by the Huntley Mountain and Catskill formations are visible north of the park at Barbour Rock . The lowest and oldest layer is the Lock Haven Formation , which is gray to green @-@ brown siltstone and shale over 400 million years old . It forms the base of the gorge , contains marine fossils , and is up to 600 feet ( 180 m ) thick .

The dominant soil in Leonard Harrison State Park is somewhat excessively drained Oquaga channery loam , which is often associated with well drained Lordstown channery loam . Much of the campground near the eastern boundary is supported by Morris gravelly silt loam , which is somewhat poorly drained due to a subsoil fragipan . The Oquaga tends to be very strongly acidic ( pH 4 @.@ 8 ) , Morris is strongly acidic ( pH 5 @.@ 3 ) and Lordstown is moderately acidic ( pH 5 @.@ 5 ) . All of these soils belong to the Inceptisol soil order .

The Allegheny Plateau has a continental climate , with occasional severe low temperatures in winter and average daily temperature ranges of 20 ° F ( 11 ° C ) in winter and 26 ° F ( 14 ° C ) in summer . The mean annual precipitation for the Pine Creek watershed is 36 to 42 inches ( 914 to 1 @,@ 070 mm ) . The highest recorded temperature at the park was 104 ° F ( 40 ° C ) in 1936 , and the record low was ? 30 ° F ( ? 34 ° C ) in 1934 . On average , July is the hottest month at Leonard Harrison , January is the coldest , and June the wettest .

## = = Ecology = =

Descriptions from early explorers and settlers give some idea of what the Pine Creek Gorge was like before it was clearcut . The forest was up to 85 percent hemlock and white pine , with the rest hardwoods . Many animal species that are now vanished inhabited the area . A herd of 12 @, @ 000 American bison migrated along the West Branch Susquehanna River in 1773 . Pine Creek was home to large predators such as wolves , lynx , wolverines , panthers , fishers , foxes and bobcats , all save the last three now locally extinct . The area had herds of elk and deer , and large numbers of black bears , river otters , and beavers . In 1794 , two of the earliest white explorers to travel up Pine Creek found so many rattlesnakes on its banks that they had to sleep in their canoe . Further upstream , insects forced them to do the same .

The virgin forests cooled the land and streams . Centuries of accumulated organic matter in the forest soil caused slow percolation of rainfall into the creeks and runs , so they flowed more evenly year @-@ round . Pine Creek was home to large numbers of fish , including trout , but dams downstream on the Susquehanna River have eliminated the shad , salmon , and eels once found in the creek . The clearcutting of forests destroyed habitat for animals , but there was also a great deal of hunting , with bounties paid for large predators .

## = = State Natural Area and wildlife = =

While Leonard Harrison and Colton Point State Parks and parts of the surrounding Tioga State Forest are now the Pine Creek Gorge National Natural Landmark , it is their status as part of a Pennsylvania State Natural Area that provides the strongest protection for them . Within this Natural Area , all logging , mining , and oil and gas drilling are prohibited , and only foot trail access is allowed . In 1988 the Pennsylvania Department of Environmental Resources , precursor to the DCNR , described it as

about 95 % State owned , unroaded , and designated the Pine Creek Gorge Natural Area . It is a place of unique geologic history and contains some rare plant communities , an old growth hemlock stand , ... active bald eagle nest [ s ] ... and is a major site of river otter reintroduction . Departmental policy is protection of the natural values of the Canyon from development and overuse , and restoration of the area to as near a natural condition as possible .

The gorge has over 225 species of wildflowers , plants and trees , with scattered stands of old growth forest on some of its steepest walls . The rest of the gorge is covered with thriving second growth forest that can be over one hundred years old . However , since clearcutting , nearly 90 percent of the forest land has burnt at least once . Typical south @-@ facing slopes here have mountain laurel below oak and hickory trees , while north @-@ facing slopes tend to have ferns below hemlocks and hardwoods . Large chestnuts and black cherry can also be found .

The Grand Canyon of Pennsylvania is known for its fall foliage , and Leonard Harrison State Park is a popular place to observe the colors , with the first three weeks of October as the best time to see the leaves in their full color . Red leaves are found on red maple , red oak , and black cherry , while orange and yellow leaves are on black walnut , sugar maple , aspen , birch , tulip poplar and chestnut oak , and brown leaves are from beech , white oak , and eastern black oak trees . Plants of " special concern " in Pennsylvania that are found in the gorge include Jacob 's ladder , wild pea , and hemlock parsley .

There are over 40 species of mammals in the Pine Creek Gorge . Leonard Harrison State Park 's extensive forest cover makes it a habitat for " big woods " wildlife , including white @-@ tailed deer , black bear , wild turkey , red and gray squirrels . Less common creatures include bobcats , coyote , fishers , river otters , and timber rattlesnakes . There are over 26 species of fish in Pine Creek , including trout , suckers , fallfish , and rock bass . Other aquatic species include crayfish and frogs .

Several species have been reintroduced to the gorge . White @-@ tailed deer were imported from Michigan and released throughout Pennsylvania to reestablish what had once been a thriving population . The current population of deer in Pennsylvania are descended from the original stock

introduced beginning in 1906 , after the lumberman had moved out of the area . The deer population has grown so much that today they exceed their carrying capacity in many areas . River otters were successfully reintroduced in 1983 and now breed in the gorge . Despite the fears of anglers , their diet is only 5 percent trout .

Fishers , medium @-@ sized weasels , were reintroduced to Pine Creek Gorge as part of an effort to establish a healthy population of fishers in Pennsylvania . Prior to the lumber era , fishers were numerous throughout the forests of Pennsylvania . They are generalized predators and will hunt any smaller creatures in their territory , including porcupines . Elk have been reintroduced west of the gorge in Clinton County and occasionally wander near the west rim of the canyon . Coyotes have come back on their own . Invasive insect species in the gorge include gypsy moths , which eat all the leaves off trees , especially oaks , and hemlock woolly adelgids , which weaken and kill hemlocks . Invasive plant species include purple loosestrife and Japanese knotweed .

= = = Important Bird Area = = =

Leonard Harrison State Park is part of Important Bird Area # 28 , which encompasses 31 @,@ 790 acres ( 12 @,@ 860 ha ) of both publicly and private held land . State managed acreage accounts for 68 percent of the total area and includes Leonard Harrison and Colton Point State Parks and the surrounding Tioga State Forest lands . The Pennsylvania Audubon Society has designated all 585 acres ( 237 ha ) of Leonard Harrison State Park as part of the IBA , which is an area designated as a globally important habitat for the conservation of bird populations .

Ornithologists and bird watchers have recorded a total of 128 species of birds in the IBA . Several factors contribute to the high total of bird species observed : there is a large area of forest in the IBA , as well as great habitat diversity , with 343 acres ( 139 ha ) of open water that is used by many of the birds , especially bald eagles . The location of the IBA along the Pine Creek Gorge also contributes to the diverse bird populations .

In addition to bald eagles , which live in the IBA year round and have successfully established a breeding population there , the IBA is home to belted kingfishers , scarlet tanagers , black @-@ throated blue warblers , common mergansers , blue and green heron , hermit thrushes , and wood ducks . Large numbers of ospreys use the gorge during spring and fall migration periods . The woodlands are inhabited by the ruffed grouse , Pennsylvania 's state bird , and wild turkeys . Swainson 's thrush breeds in the IBA and the northern harrier breeds and overwinters in Pine Creek Gorge .

A variety of warblers is found in Leonard Harrison State Park . The Pennsylvania Audubon Society states that Pine Creek Gorge is " especially rich in warbler species , including Pine , Black @-@ throated Blue , Black @-@ throated Green , Blackburnian , and Black @-@ and @-@ white . " Many of these smaller birds are more often heard than seen as they keep away from the trails and overlooks .

= = Recreation = =

= = = Trails = = =

Leonard Harrison State Park is a destination for avid hikers , with some challenging hikes in and around the Grand Canyon of Pennsylvania . The park has 4 @.@ 6 miles ( 7 @.@ 4 km ) of trails that feature very rugged terrain , pass close to steep cliffs , and can be slick in some areas . In 2003 , the DCNR reported that 37 @,@ 775 people used the trails in the park , and another 24 @,@ 407 bicycled in it .

Overlook Trail is a 0 @.@ 6 @-@ mile ( 0 @.@ 97 km ) path to Otter View , a vista looking to the south . This moderately difficult loop passes reminders of the CCC 's work in the park , including a plantation of red pines and an old incinerator .

Turkey Path is a difficult trail , 2 miles ( 3 @.@ 2 km ) long ( down and back ) , that follows Little



Fourmile Run down the side of the canyon , descending over 800 feet ( 240 m ) to Pine Creek and the rail trail at the bottom of the gorge . It was originally a mule drag used to haul timber to the creek . There are several waterfalls on the trail , which passes through an environmentally sensitive area and is on a steep slope . Hikers are encouraged to remain on the path to reduce erosion and protect fragile plant life along the trail . In 2006 a hiker who had left the path slipped near a waterfall and fell to his death .

A vista at the halfway point on Turkey Path was constructed in 1978 by the Youth Conservation Corps . Hand rails , steps and observation decks were added to the path in 1993 by the Pennsylvania Conservation Corps . The park website classifies it as a " down and back trail " since there is no bridge across Pine Creek . However , there is also a Turkey Path from Colton Point State Park on the west rim of the gorge down to a point on Pine Creek just upstream of the end of this trail . According to Owlett and the DCNR Pine Creek Rail Trail map , the creek can be forded with care when the water is low , and the Turkey Path connects the two parks .

Pine Creek Rail Trail is a 63 @. @ 4 @- @ mile ( 102 @. @ 0 km ) rail trail from Wellsboro Junction , just north of Wellsboro , south through the Pine Creek Gorge to Jersey Shore : 1 mile ( 1 @. @ 6 km ) of this trail is in Leonard Harrison and Colton Point State Parks . A 2001 article in USA Today said the scenic beauty of the Grand Canyon of Pennsylvania made the trail one of " 10 great places to take a bike tour " in the world .

= = = Camping and picnics = = =

Camping is a popular pastime at Leonard Harrison State Park , with 3 @, @ 511 persons using the rustic camping facilities in 2003 . The DCNR classifies camping facilities as " rustic " if they do not have flush toilets or showers . The state has renovated the park camping area since 2003 , building modern bathrooms with flush toilets and hot showers , and no longer considers it " rustic " . The park has updated electric sites for RV campers as well . The campground has picnic tables and fire rings . The park has almost 100 picnic tables for use ; seven of these tables are in shelters . The park hosted some 29 @, @ 150 picnickers in 2003 .

= = = Hunting , fishing , and whitewater = = =

Hunting is permitted on about 250 acres ( 100 ha ) of Leonard Harrison State Park : hunters are expected to follow the rules and regulations of the Pennsylvania State Game Commission . The common game species are ruffed grouse , eastern gray squirrel , wild turkey , white @- @ tailed deer , and black bear ; however , hunting groundhog is prohibited . Additional acres of forested woodlands are available for hunting on the grounds of the adjacent Tioga State Forest .

Fishing is permitted at the state park , though anglers must descend the Turkey Path to reach Pine Creek . This has been designated as approved trout waters by the Pennsylvania Fish and Boat Commission , which means the waters will be stocked with trout and may be fished during trout season . Other species of fish found in Pine Creek include smallmouth bass and some panfish . Several small trout streams are accessible from within the park , which had 2 @, @ 597 anglers in 2003 . Historically , fishermen of note on the stretch of Pine Creek in the park include President Theodore Roosevelt and Pennsylvania Governor William A. Stone .

Edward Gertler writes in Keystone Canoeing that Pine Creek " is possibly Pennsylvania 's most famous canoe stream " and attributes this partly to the thousands who decide to boat on it after they " peer into Pine Creek 's spectacular abyss from the overlooks of Leonard Harrison and Colton Point state parks " . The park contains 1 mile ( 1 @. @ 6 km ) of Pine Creek , which is Class 1 to Class 2 whitewater here . Boaters do not normally start or end their run in the park , which has no launches : it is part of the 16 @. @ 8 @- @ mile ( 27 @. @ 0 km ) trip from Ansonia ( Marsh Creek ) south to Blackwell ( Babb Creek ) .

= = Nearby state parks = =

Leonard Harrison State Park is mostly in Shippen Township , with a small portion in Delmar Township north of Stowell Run . It is 10 miles ( 16 km ) west of Wellsboro at the western terminus of Pennsylvania Route 660 . The following state parks are within 30 miles ( 48 km ) of the park :