



The Hemlock

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“My love affair with nature is so deep that I am not satisfied with being a mere onlooker, or nature tourist. I crave a more real and meaningful relationship.” ~Euell Gibbons

A New Spring

T. S. Eliot famously said that “April is the cruelest month,” and this April has made his words seem especially real. According to the average temperature on my electric bill, it has been the coldest April since we began publishing *The Hemlock* eleven years ago. But at last we seem to have arrived at the weather we normally associate with the end of the spring semester. I suspect that like me, all of you are looking forward to spending more time outdoors, enjoying the many recreational opportunities of north-central Pennsylvania.

As always, this issue of *The Hemlock* contains articles written by LHU faculty, students, and staff, as well as articles from members of the larger Lock Haven community. If you would like to write something for a future issue, please contact me (rmyers3@lockhaven.edu).

A Hemlock’s History Lesson

~Jim Hyland (DCNR Forester, Tioga State Forest, jhyland@pa.gov)

Recently, while driving along a state forest road on the north face of Bald Eagle Mountain near Aughenbaugh Gap, Lycoming County, a colleague and I noticed that the life of a great old hemlock had come to an end. Apparently snapped in half by a fierce downdraft, its majestic upper 40 feet was now rotting in the ditch line. We wondered how long this tree had been struggling to survive on this bony side hill...perhaps one, two, maybe three hundred years or more? We couldn’t resist cutting a “cookie” and counting the rings. Here’s what they told us.

The hemlock had begun its life in about the year 1640. Being a lover of shade, it probably sprouted in the deep shadows of its massive evergreen parents and neighboring American chestnuts, white pines and mixed oaks. In the valley below, along the West Branch of the Susquehanna, written history had not yet begun. The Susquehannocks cleared the lands and lived near the mouths of the big tributaries of the river. They relied on the fish from the river, and hunted elk and other big game in the virgin forests of the bottomlands.

The tree's rings also told us that its best growing seasons took place between 1660 and 1700, the only years in its long life when it was able to gain more than an inch of diameter in an entire decade. It was about 1700 that times became much leaner for the



tree. Growth slowed dramatically, and by 1780 growth had slowed to one-quarter inch diameter per decade. The tree's ownership had changed too. At birth it belonged to nobody, at least not on paper. The native tribes may have claimed territorial rights, but the mountain on which the tree was slowly growing had never been bought or sold.

By 1660, the once powerful Susquehannocks had lost control of the land to the Iroquois. The Iroquois (Indian Nations) in turn sold the land to Thomas Dongan, the governor of the province of New York, who then sold the land to William Penn. The document describing this transaction (translated to modern English) reads: "Thomas Dongan, for in consideration of the sum of one hundred pounds of lawful money of England, paid by William Penn, gives the rights to that tract of land on both

sides of the river commonly called the Susquehanna and the lakes adjacent, in the Province of Pennsylvania, in America, beginning at the mountains or head of the said river, and running as far as and into the Bay of Chesapeake, with all isles, islands, mines, minerals, woods, fishings, hawkings, huntings, fowlings, and all other royalties,

profits, and commodities which Thomas Dongan lately purchased or had been given him by the Seneca or Susquehannock Indians." This description was way too vague for the purchase of such a large and important piece of real estate, and such descriptions, combined with trickery on both sides, often ended in disputes and bloodshed.

As expected, the Indians were angry over the transaction, as they felt they had been cheated out of their land. To satisfy the Indian Nations, the Penn family finally brought together all interested parties, including 23 Indian chiefs, and formally traded the lands for the following parcel of goods: 500 pounds of powder, 600 pounds of lead, 45 Guns, 160 coats, 100 blankets, 200 yards of half-thick, 100 shirts, 40 hats, 40 pair of shoes and buckles, 40 pair of stockings, 100 hatchets, 500 knives, 100 houghs (hoes, hocks, tomahawks?), 60 kettles, 100 tobacco tongs, 100 scissors, 500 awl blades, 120 combs, 2000 needles, 1000 flints, 24 looking glasses, 2 pounds of vermilion, and 100 tin pots, besides 25 gallons of rum, 200 pounds of tobacco, and 1000 pipes. Apparently, the Indians were happy with the transaction and signed off on it. Now they "officially" had been cheated out of their land. Today the land and its resources are priceless, while the parcel of goods has been lost to history.

By 1800, and after many more treaties and transactions including one in 1768 that acquired the land to the east of Pine Creek (again? PA historians please help), Europeans were beginning to have a profound influence on the landscape. Settlements were popping up all along the river and its tributaries, and the first sawmill in the Pine Creek Valley was in operation at the confluence of Little and Big Pine Creeks. In the years between 1800 and the Civil War, much of the regions massive old growth white pine was harvested, slid or splash-dammed to the rivers, bound into rafts, and floated to the Chesapeake. Our hemlock, now over a foot in diameter and isolated way up on Bald Eagle Ridge, would survive the white pine era. It is possible, however, that some of its white pine neighbors did not, for its growth rings begin to widen about 1830 in response to increased light or nutrients.

In the years following the Civil War until about 1920, the forests of Lycoming County were literally reduced to a desert. The Industrial Revolution had a great appetite for raw materials, and Northcentral PA's forests were an "all you can eat" buffet. Larger hardwoods were sawed into lumber, while smaller ones propped up the ceilings of Schuylkill County's coal mines. Hemlock, formerly ignored due to the wood's tendency to split, was now in great demand. Entire stands were leveled, and sadly the wood was still left to rot. It was the thick bark, discovered to be high in tannic acid, that was now in demand. It was stripped from the felled trunks, stacked on railroad cars, and sent to tanning operations called *tanneries*. The bark was processed in a way similar

to making tea, and the tea produced from hemlock bark was a great preservative for animal hides.

So how is it that the 1640-born hemlock on Bald Eagle Ridge survived the clear-cutting? Statewide, many acres of forestland did. Surviving old growth stands are typically found in remote or steep, inaccessible areas and are usually relatively small “pockets” of trees. Expired logging contracts, broken machinery, sick workers, boundary disputes, etc., are typical reasons for the incomplete work of yesteryear that now gives us the opportunity to enjoy the trees as they once were.

Fortunately, the wanton destruction of Pennsylvania’s forests, other than the aforementioned lucky acres, was not going unnoticed by those who understood the consequences of such practices. By the 1890’s, Dr. Joseph Rothrock of the University of Pennsylvania, the first president of the Pennsylvania Forestry Association, and the first State Forester, had been campaigning for responsible forestry practices for over twenty years. Rothrock knew about some of the overlooked pockets of timber in the Commonwealth, and he worked to establish them as special management areas long before saving “old growth” was on every environmentalist’s agenda. He wanted people to understand why William Penn called this place “Penn’s Woods”, and the only way to do that was to preserve stands of original trees. Rothrock liked how New York State, to protect the state’s water resources, established the Adirondack and Catskill Forest Preserves, and he wanted Pennsylvania to follow their lead.

In 1898, a 7,380-acre tract on Young Woman’s Creek in Clinton County would be purchased as the first of thousands of acres of land, formerly owned by lumber companies, for the new Pennsylvania State Forest Reserves. Rothrock’s philosophy differed from New York’s in that he called Pennsylvania’s new lands a “reserve” instead of a “preserve”, as he strongly believed that a forest should be managed for “multiple use”, including sustainable, sound logging practices via the art and science of silviculture, which involves the skillful regeneration of trees in a forest ecosystem. These fundamental differences in policy still exist today, as logging is not permitted in the Adirondacks or Catskills. We call it simply: the *working forest* concept. And so by 1930, our hemlock on Bald Eagle Ridge had survived its biggest threat, the tanning industry. Like the sawmills, Northcentral Pennsylvania’s world-renowned tanneries had all been closed, dismantled, and sold for scrap.

Looking like a long tuft of wool on the side of a recently sheared sheep, the hemlock and its neighboring old growth oaks, birches, and other hemlocks must have been visible on the ridge for miles. In the first part of the 20th Century, Lycoming County’s formerly majestic forested landscape was known as the “desert of Pennsylvania”.

Fortunately, while visionary men and women purchased the lands for next to nothing, Mother Nature was quietly cooking up a miracle in the face of great tragedy. Fires sparked by steam engines and careless people ripped across the land now littered with stumps and limbs, and one such fire is said to have stretched from Galeton to Jersey Shore. Following the fires on such steep terrain, the hillsides surely lost hold of the ash and mud and all but choked the life from the waterways. Following the great fires, the land became tangled with briars and brambles whose root systems probably saved what was left of the soil from heading downslope with the rain.

Due to relentless market hunting in the previous decades, deer, turkey, and other game were almost nonexistent in the recently ravaged forest of the early 1900s. Robert Neefe, one of the first foresters in charge of the Black Forest region, recorded in his journal that only nine deer were harvested in the year 1913. The frequent fires and low deer populations were the ingredients Mother Nature was using to cook up her miracle. Oak seedlings, very tolerant of fire, were sinking their roots into the mountainsides, while the less tolerant and faster growing trees like birches, maples, and poplars were getting burned over and dying. Forestry employees and CCC camp members were also planting millions of conifers to supplement the loss.

By the 1940's, the Department of Forestry, now known as the "Department of Forests and Waters", had purchased tens of thousands of acres in Northcentral Pennsylvania for just a few dollars per acre. Recreation was becoming well established in the region as hunters began to pursue the deer herd that had been steadily growing on the brushy sidehills and ridgetops that were now dotted with hunting camps. The oaks had become well established too, and in many areas, they became the dominant species (replacing the dead and dying American chestnuts) in the forest.

By the 1970's, the deer herd was legendary. And we still hear about how "great" it was all the time: "Well I remember seeing 50 deer a day!" Well, the Northcentral forests can't support that many deer, and never should have been expected to. Pre-settlement, there were probably about 10 to 15 deer per square mile. Many hunters can't cope with those odds, and so politics ruled policy. And so it did through the 1970's and 80's, and the miraculous forest suffered severely.

Up on Bald Eagle Ridge the hemlock held its ground amongst its 350-year-old neighbors. Now 40 inches in diameter, its heartwood was hollow, and rain, ice, and insects had found their way inside. It wouldn't be long now until a heavy snow or stiff wind would bring it down. And in the springtime, after 364 years on the ridge, the hemlock fell to the last of untold thousands of storms that had whistled through its

boughs. Nearby, formerly hidden in the shade of its mother, a new little hemlock was stretching skyward toward the future. We have high hopes.

Is the US a Sustainable Society?

~Md. Khalequzzaman (LHU Geology Professor)

Sustainability is the buzz word of our time. Will the education our students receive be beneficial to them on a long haul? Will the energy plan that our nation has adopted be sustainable for the environment and ecosystem? Will our children have the same quality of life that we have had? These are all questions that we must ask ourselves if we want to have a sustainable society.

Many say that we are living in the age of sustainable development. So, the question that begs to be answered is, what is sustainable development? This concept has been defined in many ways, but the most frequently quoted definition is from "Our Common Future," also known as the Brundtland Report. That document states, "*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*" Sustainable development, however, does not just revolve around the concept of economic needs. It also advocates for social inclusion and environmental protection. In fact, many argue that under the premise of sustainable development, economic activities must take place within a safe operating space that ensures the preservation of the environment so that the greater society will benefit.

If we are to ensure that we will meet the needs of our future generations, then the ever-increasing demands on finite natural resources must be limited in the future. As it stands now, at the current rate of consumption, we are overexploiting non-renewable resources at 120% of the total reserve that our planet contains. In other words, we are using 1.2 times the resources that our one planet has in her reserve.



We are borrowing 20% of certain resources from the future. Most natural resources, such as metals, fossil fuels, groundwater from deep aquifer, and rare earth elements are

non-renewable and have a limited reserve. We need to exploit and use those resources in a way that does not deprive our future generations from those vital resources. As the International Union of Conservation of Nature puts it, "We have not inherited the planet from our predecessors, we have borrowed it for our children."

Currently, humanity is on a path of economic development that disproportionately benefits the top 1%, and the developmental activities are happening at the cost of the environment. Realizing that the current economic development is not going to be sustainable, under the auspices of the UN, the world leaders from 195 countries, including the US, adopted 17 sustainable development goals (SDGs) in 2015.

These 17 goals can broadly be divided into three major categories: economic growth, social inclusion, and environmental protection. The SDGs are collectively grouped as "Vision 2030," because for the next 15 years all signatories are promise-bound to achieve these goals in their own countries.

The SDGs call for no poverty, zero hunger, gender equality, universal health coverage, quality education, clean energy, clean water and sanitation, economic growth, building resilient cities, climate action, protection of ecosystems, responsible consumption, peace-justice-institutions, and partnership. The countries that have made this commitment are expected to prepare an annual progress report on the success of the SDGs. Yet, although the world community is very aware of the SDGs, it is hardly discussed in the electronic and press media in the US.

Recently, the first progress report of the SDGs indices has come out. In the report, the US ranked 42nd among 157 participating countries. The overall score for the US is 72.4%, which is a C grade. The US ranked behind many developing countries, such as Croatia, Moldova, and Romania. The US scored low in gender equality, responsible consumption, climate action, preservation of ecosystems, and peace-justice categories. It is shocking to learn that being the most prosperous economy and powerful nation on earth, we are not even among the top ten sustainable societies in the world. The sooner we act on the SDGs, the faster we can take the lead on the issues vital to sustainable development.

Hemlock Hike: Chuck Keiper Trail/Swamp Branch Trail

~Bob Myers (LHU Director of Environmental Studies)

This 5-mile fairly-level loop takes you on a pretty section of the Chuck Keiper Trail and past the former site of a Civilian Conservation Corps camp. To get to the trailhead from campus, head north on Rt. 120/Susquehanna Avenue, towards Renovo. At 7 miles, turn left onto Eagleton Road. Follow Eagleton Road for 10.4 miles until it ends at Beech

Creek Road (you can also get to this point from Beech Creek/Rt. 150). Turn right onto Beech Creek Road and go 4.8 miles to Coon Run Road—turn left (Coon Run Road is not well-maintained, but is still passable without 4-wheel drive). Go 2 miles and park at the sign for Swamp Branch Trail, across from Camp Big Horn.



Following beautiful, hemlock-lined Swamp Branch, head west on the Swamp Branch Trail, which is identical to the orange-blazed Chuck Keiper Trail. After about a half mile, you'll cross the branch on an elaborate wooden bridge; continue west following the blazes, through a mixed oak forest. After you've gone two miles, you'll pass through an orchard of white pines and then emerge onto Penrose Road near The Hemlocks camp—turn left (south). After another mile, you'll reach an intersection with Coon Run Road—turn left (northeast) onto Coon Run Road. About a mile later, you'll notice an old chimney off to the right. This was part of the State Camp CCC camp (S-76), which is commemorated with several signs and

markers a bit further up the road. Eventually, if you keep following Coon Run Road, you'll get back to your car.

For more information on the Chuck Keiper Trail, see the Keystone Trails Association website (<https://www.kta-hike.org/chuck-keiper-trail.html>). There is an excellent guide to the trail that was written by Dave Gantz—you can buy it at Appalachian Outdoors in State College or online from pahikes.com. Thanks to John Reid, Elizabeth Gruber, and Michael Myers for helping me scout this hike.

The Lions of Our Past

~Jim Hyland (DCNR Forester, Tioga State Forest, jhyland@pa.gov)

“Are you sure it wasn't an otter, a coyote, or a fisher?” I was prodding my friend with alternative critters, but he wouldn't budge. He was cycling on the Pine Creek Rail Trail just a few miles north of Blackwell, when he's sure that a mountain lion jumped down onto the trail, paused, and then snuck into the brush.

Sightings of *Felis concolor*, the mountain lion, are reported to the district forestry office or game commission every year, and some are hard to dismiss, especially coming from trustworthy individuals.

In the Pennsylvania Wilds, the last bounty paid on a mountain lion (also known as a painter, catamount, puma, or panther), was paid in Clinton County in 1871. Despised for their reputation for killing livestock, lions were shot or trapped for money as early as the 1600's. But were all the lions really killed?

By 1864, apparently the residents of Haneyville, Lycoming County, thought they were all gone too. The story was told by Moses Button and Charlie Crawford, who lived on Long Mountain, near where the Haneyville ATV Trail is today, and appears in Henry Shoemaker's Black Forest Souvenirs, first published in 1914. A note of caution: Mr. Shoemaker was known to embellish the truth a bit.



The story begins on a moonlit Christmas Eve in 1864, when people residing on the mountain heard the screaming cries of a mountain lion in the woods nearby. The sound terrified them, as they had heard stories from days past about the huge ferocious cats that their forefathers had to battle in their taming of the wilderness.

A hunt for the lion ensued, but was unsuccessful, and the residents began to think it had moved on or never existed. Then a week later the lion surprised two young men on a horse-drawn sled and chased them to safety in a barn. The hunt was on, and it concluded when George Shover and Jake Zinck tracked the cat into a cave near the top of Miller Run, presently known as Miller Run Wild Area in Tiadaghton State Forest.

The two men, afraid to enter the dark cave in pursuit, lit a smoky fire just inside, and then sealed off the entrance. They camped and waited for the cat to suffocate. The next day they reopened the cave and found the lion dead. It measured 11 feet from nose to tail, and as the story goes; they skinned it and fried up some of the cat's chops to celebrate.

An 1890 *Williamsport Gazette* article describes how one Joe Fenstemacher, who was a marksman and expert hunter from Slate Run, shot at and wounded a panther that was lying on a rock outcrop near Slate Run's headwaters. He too tracked it to a small cave, and thinking it was dead, made the greedy mistake (bounties offered big bucks in those days) of crawling about twelve feet into a confined space in which he could not turn around. In what was described as "Egyptian darkness", the wounded panther latched

onto his face with teeth and claws, and remained attached as the bleeding man backed out of the cave. Once in daylight, Fenstemacher killed the cat with his knife, but only after a great struggle.

We've all heard modern mountain lion stories circulating through hunting camps, etc., and I admit to enjoying them very much. In recent history, over 5000 sightings have been reported from 26 states east of the Mississippi. A fair number of those sightings have been in Pennsylvania, especially in the north central counties, where sometimes a Sasquatch is "seen" as well.

Researchers with the Cougar Network, a research group dedicated to documenting the sightings of cougars outside of their normal range, have never been able to confirm, that is, prove without a doubt, any of the Pennsylvania sightings. However, sightings have been *confirmed* in Delaware (probably an escapee from captivity), New York, Kentucky, Massachusetts, Minnesota, Connecticut and Vermont. In fact, the cougar killed by a vehicle in Connecticut in 2011 had also been seen in NY and was confirmed through DNA sampling to have traveled 1800 miles from a known lion population in the Black Hills of South Dakota! In addition, there is very strong evidence that they are becoming established in remote sections of the Carolinas and Virginias, and they are definitely present in Florida and eastern Canada.

Gone but not Forgotten? Grave Musings

~Earle F. Layser (Retired Environmental Consultant and USDA Forest Service)

On misty and gray late-autumn days, I often tour memory lane—the many cemeteries located in upper Pine Creek. Located in Lycoming and Tioga Counties, Pine Creek Valley is lined with centuries old weathered granite and sandstone monuments. Except for long-ago published profiles of chosen patriarchs, the life stories of the area's pioneers and common folks were sparsely recorded; names and dates of birth and death alone, are etched into the stones. Dates with little accompanying narrative. A frequent wistful epithet, *Gone but not forgotten*, is contradicted by the fact we really remember little about those people and their lives.

Settlement at the mouth of Slate Run began around 1793; John Tomb was born there before Jefferson sent Lewis and Clark to explore the upper Missouri. At that time, Pine Creek epitomized Puritan minister Cotton Mather's "howling wilderness."



Contributing to the absence of individual's stories were deeply held religious-based attitudes—the wilderness frontier was commonly associated with evil and abhorred; individualism and self-glorification were considered vain and sinister—the parish identified

themselves with sheep, they were apart of God's flock. In the history of the western United States, the rough and tumble frontier lifestyles and wilderness were celebrated; for early Eastern settlement and life, centuries of opaqueness exist. Most earthly ambitions were repressed. Phillip Tome's *Thirty Years a Hunter* from that time period appears as a folk life exception.

Settlement on the Eastern frontier generally progressed through building a church. Located on the hillside above Route 414, only a foundation of Slate Run's early Methodist Church remains. Constructed long before modern handicapped access requirements, three flights of overgrown concrete stairways, thirty stair steps, switchback up the steep embankment to what was the entryway to salvation.

The church was intact and still functioning when I was a child. Above the entry, in a belfry, a bell would toll, solemnly summoning the parish's gathering. The bell chimed in the mountain valley for a century or more of Sundays, beginning when horse drawn buggies, and later spoke-wheeled automobiles, gathered there. In the early 1950s, for a week each summer, Mennonites would hold Bible School in the worn old church. Pine Creek's residual population, by that time, it seemed, had generally lost much of the fervor of its religious roots. Gathering children from communities along Pine Creek, the Mennonites endeavored to introduce us to the gospel. The Mennonite women's singing filled the church with the harmony of old-time hymns. It made an impression; I still recall it. But in our semi-isolated rural lives, we were looking for social interaction, rather than redemption. The apogee of Bible School, what we all waited for, was recess, when we could play tag in the graveyard behind the church. Tirelessly running, ducking and dodging in and around and behind the Tomb's and other's tombstones—Callahans, Campbells, Hilborns, Herritts, McCaushaways--we trampled across the

graves of some forty-four old souls. Hilborns, appropriately named for this mountainous region, occupied the burial high ground, overlooking the Tombs below. John Tomb's inscription states he was born in 1802, 215-years ago-- likely the scion of original settler Jacob Tomb. Herritt is a name associated with the operation of long-past logging camps in the Black Forest ... The "Gone but not forgotten," epithet is present; it causes thoughtful pause, who today really remembers?

Across Pine Creek, on the hill behind the Hotel Manor, another Slate Run Cemetery has about a hundred graves. Once a Baptist graveyard, the church burned in the 1930s. Since then, denominational allegiance, or a lack thereof, has not been a factor. Anyone can be buried there, no charge for the ground. You can pick your own final resting spot close to a historic Pine Creek character. One marker there is for Revolutionary War veteran, Robert Campbell. History tells us he was a fifer and drummer for Washington's Continental Army, and later, a "zealous preacher." Is Robert Campbell really buried there? Somewhere there, maybe. A local source claims his resting place was selected from among a dozen unmarked graves. Upper Pine Creek's pioneer names are well represented: Callahan, Campbell, Clark, Hilborn, Miller, Tomb, Tome. Veterans from six wars, the Revolutionary to Vietnam, rest here. An epithet for Richard Tomb (1854-1905) poignantly reflects his widow's grief: "Husband, I thought earth's finest things were destined for decay, but never had I thought that thou so soon must pass away."

Among the monuments, I recognize names of people I knew growing up. They all seemed ancient to me back then. Some had lived during the lumbering era. Not just names, my mind resurrects those persons. There is Grant Tomb (1888-1953), who, when I was a child, owned and operated the Manor Hotel. A tough old guy, I recall my Dad talking about Grant vaulting across the bar to break up a fight in the hotel—it was the Tombs versus Tomes. The two considered themselves entirely separate clans. A living Tomb descendant, I know, who grew up on Tomb Flat below Slate Run, was upset by the recently installed brass plaque monument at the mouth of Slate Run. It credits John Tome as the first settler there, instead of Tomb, contradicting Tomb tradition (Meginness' 1892 *History of Lycoming County*, misstates it was "John Lamb").

Back at the cemetery, Miles McWilliam's (1891-1975) name leaps out. A flush-faced Irishman with perennial beard stubble; he was a WWI Veteran and the Brown Township Supervisor. Miles once employed me to clean out culverts on the Beulah Land road. I was just a kid, my first job; I had to get "working papers." Dropped off on the mountain top, I was supposed to work my way back down the five miles, cleaning ditches and culverts to where Miles told me he would be waiting. Wanting to make a good impression, I worked at a blistering pace, running between culverts. When I found

Miles, several hours later, he was asleep in his old battered truck, window down, snoring. A half-empty whiskey bottle lay on the seat beside him. I startled him awake, "You here already?" he grunted. I got in the truck, we drove back to the top, where I was instructed to clean the same culverts again, while Miles headed back to the bottom to await me and the workday's end.

William and Anna Wolfe's headstones (1915-1987, 1917-1999) catch my eye. Beginning in 1946, after Bill came home from the WWII, they owned, and for thirty years operated, the Slate Run Store and post office. Bill Wolfe played the fiddle and also labored in nearby flagstone quarries; Anna's maiden name was McCauchaway. While waiting for mail delivery in their home, store, and post office combined, everyone got to know them. The mail carrier everyone awaited was Edward "Lee" Hostrander (1889-1964), whose family farmed at Tumbling Run, a few miles up the road.

Arnold Levin (1903-1964) rests there on the hillside, too. I once worked with "old man Levin" cutting pulp wood along the Belulah Land road. We were laying up a lot of cords, more than breaking even, maybe, until he drove onto a stump, puncturing a truck tire. Our operation shut down. Between us, we lacked the money for a replacement tire.

Reuben Hillyard (1932-2011), buried there was a Korean War veteran. In later years, he sometimes mowed our lawn at the house when we were gone. Two-acres plus hand trimming for ten dollars. My mother complained about the outrageous cost.

George Wills' (1898-1985) headstone recalls a friendly accommodating person. He worked with the CCCs, later, for many years was a DCNR District Forester. Along with a small crew, that included Bob Webber, Jim Clark, and Gale and Jerry Tomb, I worked for George, up on Route 44, at a place once known as the Black Forest, planting trees in 1961.

James "Jim" Clark (1887-1967) rests there, too. As a young man he had worked with the wood hicks peeling tannery bark from hemlocks in the Black Forest. He once told me how he had walked up to a standing dead hemlock tree, sunk his ax in it, turned to do something else, and that was all he remembered until they dug him out from underneath it. The old rotten tree had collapsed on top of him. He was fortunate to have survived. In his last years, Jim could never understand how the price for a loaf of bread could be a whole dollar. At the far end is David Wolfe (1940-2010), my best friend growing up on Pine Creek. Together we fished all the nearby mountain streams, every run within hiking and bicycle pedaling distance. The tributaries back then it seemed, had limitless populations of native brook trout.

Tombs, Callahans, and Bonnells originally settled on logged-off bottomland below Slate Run. Close neighbors, their farmsteads adjoined. When I was a kid, Tomb Flat was in fact still occupied by Tomb descendants. Old family cemeteries are present at each of the settlement locations. The Tombs' pioneer cemetery rests on the bank of Pine Creek below today's DCNR Tomb Flat public access and campground (it is sometimes misidentified as the "old Callahan" cemetery). Bikers on the Pine Creek Rail Trail pass close by the graveyard, mostly without knowing it exists. Some of the Tomb marker inscriptions are illegible, eroded by time. A century or more ago, a white pine tree was planted in the center of the burials, it towers over the site. The nutrient-enriched ground has no doubt contributed to the tree's stature.

John Callahan (1796-1896) and his wife Esther (1789-1860) are buried at the historic Callahan Cemetery. John Callahan made history by living to be 100-years old, astonishingly beating the odds when a much shorter life was more common. John and his wife Esther reportedly had thirteen children. The cemetery is located above and immediately next to highway 414, opposite Callahan Run. It is populated mostly with Callahans.

The historic Bonnell Cemetery is located next to an old roadway above route 414. Overgrown with forest, the Bonnells are buried where you hear the rushing of their namesake stream. Except for a single Campbell, only Bonnells are buried at the Bonnell Cemetery. George Bonnell (1787-1879) and his wife Mary raised ten children on the clan's homestead. William Bonnell (1813-1889) and his wife Mary are also buried there. They had six children. The night before William died, at age 75, his obituary says, he "exhorted his family to give themselves to God."

Families of these early settlers were remarkably large, but Thomas Lloyd and Elizabeth, who settled near Blackwell (Lloyd's Run at Rattlesnake Rock), set the fecundity record: 16 children. When I was a child the old Llyod house and barn still stood in a meadow clearing across the road from the DNR parking area. How did they manage with such large families? It's mostly an untold story. Typically, the women are mentioned only in the context of being a patriarch's wife. Unimaginable today, the women somehow did it under what we today consider primitive frontier conditions. My father used to say, "And all without benefit of a doctor, too." But a tour of the pioneer cemeteries provides an additional perspective: high infant mortality. As one anonymous writer put it: "Old cemeteries filled with the young."

Located seven miles from the village of Cedar Run, the settlement of Leetonia was situated deep in the mountains, providing livelihood through lumbering and a tannery. Eventually, a railroad and daily stage coach delivered outside access. A photograph in

Pine Creek Villages shows row houses stacked together above the streamside. Today, an unmaintained path passes between ancient sugar maples leading to an old hillside cemetery located above what was once the town site. Hard to say how many souls rest there; a rough estimate, maybe twenty-five. Any wooden headboards are gone now. The cemetery reflects heart-rending tragedies that cry out with sorrow yet today. A dozen or more side-by-side gravesites, mostly unnamed, are terraced stair-step fashion into the hill. They are all infants. There is no known documented history, no doubt influenza was responsible. An imposing monument stands out above all others: Leon Campbell (1891-1918) killed in WWI. He is buried beside his mother, Julia (1860-1911). Their large carved granite monument sets on a big sandstone block. How were those ponderous stones transported to this hillside site?

Not all WWI casualties were buried in France. In response to overwhelming political pressure, the United States government spent two years and \$30 million recovering and transporting home the remains of 46,000 of its dead soldiers—referred to as “grisly exhumations.” Another 30,000 are still buried in Europe’s military cemeteries. Leon’s remains were one of those recovered, making a long trip by steamship, rail, and finally wagon, from a French battlefield cemetery to the isolated outpost of Leetonia.

Blackwell is among the oldest settlements on Pine Creek. When Enoch Blackwell (~1764-1816) reached the mouth of Babb Creek in the beginning of the nineteenth century, it is recorded, he settled “in the darkest kind of wilderness.” A curious story, frequently repeatedly in histories, occurred when Enoch and his son William arrived to claim their Pine Creek land warrant at the mouth of Babb Creek, they discovered A.P. Harris and George Bonnell already living there. It is stated, “The Blackwell’s took possession ...” If Harris and Bonnell had already begun making improvements, “taking possession” might have involved some frontier drama. George Bonnell apparently moved down to the previously mentioned Bonnell Run homestead location following this incident. Secluded on a densely forested bench above the town is the old Blackwell Cemetery. There is a monument for Emory H. Blackwell (1894-1918). He was one of the 26,000 American soldiers who died at the Argonne Forest in France. Killed October 25, 1918, Emory died only days before the end of the war. Another Blackwell, George’s (1821-1898) inscription states, he fought in five major clashes of the Civil War, including Chancellorsville, Gettysburg, and the Wilderness—how he survived those battles is a mystery.

Located near Gamble Run, behind the now modernized Baptist Church, the Cedar Run Cemetery was originally known as the old Gamble Cemetery. One of the larger graveyards on upper Pine Creek, about 140 souls rest there. It is dominated by Gambles, but other Pine Creek pioneer family names are also well-represented:

Campbell, Clark, Champaign, Hilborn, Herritt, Hostrander, Morrison, Tomb. Early settler Andrew Gamble (1780-1862) was married to Elizabeth Tomb (1786-1865), both are buried there. (It can be confusing because there is also a Gamble Run on lower Pine Creek, where John Gamble Sr. first settled in 1790.) A marker for Revolutionary War veteran Jacob Thome (1750-1813) exists here (a variant spelling of Tome or Tomb; perhaps it is the Tome who first settled at the mouth of Slate Run in the late 18th century?) and his wife Jane Tomb (undated).

My experience walking among the Gamble Cemetery gravestones is similar to that at Slate Run, names of people I knew as a child hauntingly leap out. Among them, Jennie Wilson (1875-1959), a Hilborn, she was the gracious proprietor of the Cedar Run Inn; Charles "Bucky" Nivison (1881-1952) worked on the railroad, his daughter Helen (1907-1985) was a school teacher at Cedar Run; Plamos Louckes (1892-1980) was a WWI veteran, who drove the school bus; John Pauckee Sr. (1915-2001) could build or fix anything, he was frequently called upon to apply his skills at our farm; John's wife, Mary, age 98, is a Tomb descendant. My parents used to say, "Everyone on Pine Creek is related." Nowadays, with the continuing influx of new people that is no longer true. Regardless of one's ancestry, though, touring these century's old cemeteries can acquaint one with upper Pine Creek's history, and it also underscores one's own mortality, reinforcing the truth that we are all, as they say, "just passing through."

Euell's Country

~Guy Graybill (Author/Photographer/Editor)

[The following article was originally printed in the January, 1983 issue of *SUSQUEHANNA* magazine]

"What is a weed?" asked Ralph Waldo Emerson in 1878. Emerson's answer: "A plant whose virtues have not yet been discovered."

Euell Theophilus Gibbons went a long way toward explaining the virtues of many of the common wild plants. Not only did he tell us their virtues; he delighted us in the telling. From his first fascinating book, *Stalking the Wild Asparagus*, to his sixth and last volume, Euell broadened the outlook of everyone who read his work.

Since environment is critical to a naturalist, one might ask: Where did Euell Gibbons reside?

For Euell Gibbons—a lanky man with luxuriant, wavy hair and with facial features as rugged as the terrain he foraged—wandering was a minor curse. It began during his

childhood in the American southwest (he was born in Texas in 1911) and continued until he was fifty-two years old. He resided for varying lengths of time in Texas, the Philadelphia area, the South Seas, Seattle, Indiana, California, Maine, Hawaii, New Mexico, and so on. His occupations—applying the term loosely—ranged from hobo to beachcomber, with some teaching, cotton picking, ranch-working, surveying, boat building, etc., thrown in. Euell and Freda Gibbons (his second wife, whom he met in Hawaii in 1948 and married the following year) finally settled in rural Pennsylvania in 1963. The process of getting rooted took eight years. Initially, Freda saw an intriguing magazine ad for a country property in Pennsylvania. She says that she “woke up in the middle of the night when it became clear to me that we should try to buy it.” When she mentioned it to Euell, he was “noncommittal”; but Freda wrote a letter inquiring about it. Eventually, they made a fifty-dollar down-payment, with plans to stop later and see what they were buying! When they finally did visit the area and saw the house and land, says Freda, “Euell loved it as much as I did.”



Occupational developments prevented their immediate move. Between that fifty-dollar down-payment and their eventual move to the property, Freda urged Euell to take a couple of years to write. Accepting her financial support, Euell wrote. What began as a novel evolved into a non-fictional paean to foraging for wild foods: *Stalking the Wild Asparagus*. The author was just launching his career when he settled into his long-awaited home in 1963.

Euell and Freda Gibbons’ real estate, for which they paid a scant five thousand dollars (but at a time when they were virtually broke) included a two-story frame house on thirteen acres. The property is located in the central part of the Keystone State. It is *not* located near any place normally familiar to out-of-state individuals. It’s *not* near Pittsburgh, Wilkes-Barre, Erie, or the Poconos. It’s *not* near Lancaster, Philadelphia, Scranton, or Harrisburg. It’s *not* near Valley Forge, Penn State, Gettysburg, or Three Mile Island. But it *is* near Troxelville, which is just one mile south of Euell’s place (and about sixty-five miles due north of Gettysburg). And it is *in* Snyder County.

Three hundred of Snyder County’s 327 square miles are either forest or farmlands, with yearly farm products valued at nearly twenty million dollars. Troxelville is a typical village of the county. The town has about forty dwellings, three churches, an antiques emporium, a general store, a barbershop and a post office (ZIP # 17882). This is the

town where Euell handled much of his mail and got his haircuts. Winifed Aikey, the lady postmaster (the U.S. government does not like the term “postmistress”) is a close friend of Freda. Troxelville’s barber, Mr. Frank Gill, is a retired school teacher and widely-read local history expert...and, for his haircuts, he charges just eighty-five cents!

The Gibbons property sits on the edge of two zones: agricultural and forest. The house faces south toward a valley of farmlands. Beyond the valley, and further south, lies Shade Mountain; while to the north, directly behind the house, is Jack’s Mountain. Both these mountains are low, slender ridges of the Appalachians. A macadam road runs by the house but turns into a gravel road a couple of miles beyond, as it winds through the mountain and passes a small state park known locally as “The Tall Timbers.”

The area is largely inhabited by descendants of early Pennsylvania Germans, although most of the distinct German traits disappeared generations ago. (In 1927, Will Rogers was riding in a mail plane which made a forced landing in a farmer’s field four miles from Troxelville. The cowboy-humorist later wrote of his surprise when the locals with whom he had talked told him that they were Pennsylvania “Dutch.”)

For country living and for foraging, Euell and Freda chose well. Huckleberries, raspberries, elderberries, strawberries, hickory nuts and walnuts are some of the most obvious wild foods in the area. Mussels and watercress can be gathered from the shallow waters of local creeks.

Having lived all my years (two score and eight) in this same region, I am familiar with the foraging activities of the local citizens. Each spring, as quickly as the snow disappears, my father-in-law brings us a batch of wild dandelion. My late father used to forage the mountain streams for terrapins (the American-Indian name for some freshwater and tidewater turtles). His method of hunting was similar to that described by Euell in his *Stalking the Wild Asparagus* (pages 268-71). We had an aunt who always helped mother make the soup after Dad had made the catch. (Our house was a century-old log structure with exposed hand-hewn beams on the first floor ceilings and a narrow, closed-in stairway. I recall the surprise and fascination of walking down the stairs on a morning after Dad had been catching terrapins, opening the door into the old kitchen, and seeing a half-dozen turtles lumbering across the kitchen floor—where Dad had earlier turned them loose—appearing from under the stove or cabinet, to innocently entertain my brothers, sisters, and myself.)

It was common practice of many families, in past generations, to forage a good deal of food from weeds, bushes and trees. For example, three-quarters of a century ago, entire families—during huckleberry season—left their houses before daybreak to walk to the

top of Shade Mountain. They would spend the entire day on the mountain, picking huckleberries. However, as Euell pointed out, serious foraging is restricted almost exclusively to dandelion-gathering today. The wild huckleberries go virtually unpicked.

Within a year after the Gibbons had moved to Snyder County, Pennsylvania, Euell's first book had attracted enough attention to cause him to be featured in a *Saturday Evening Post* article. As a long-aspiring fiction writer, Euell Gibbons hadn't made it. As a naturalist, he was on his way to celebrity status.

While he was writing his later books and magazine articles, Euell and Freda were visited by interviewers from other magazines. That was just the start. He was invited to make public appearances. He recorded an album of readings from the writings of Thoreau. He was interviewed on television. He was hired to make television commercials for a cereal product. People began to recognize him as he traveled. And, in the ultimate measure of celebrity achievement, comedians, from Bob Hope on down, told their Euell Gibbons jokes. (Said Hope: "Euell Gibbons' is the only house in America where they have two Christmas trees. There's one to put up and the other to serve for Christmas dinner.")

As his career accelerated, Euell still found time for local school and club visits. It was on one of the local radio "phone-in" shows that I first met the man. (I was co-host of the Friday evening program broadcast out of Selinsgrove, Pennsylvania.) I recall asking if it wouldn't be reasonable to eat tiny amounts of a wild, but unidentified, plant which appeared edible. Absolutely not, Euell answered. One should always know, he emphasized, what wild foods one is eating.

I also learned that Euell Gibbons wrote poetry. On our radio show he read a six-verse poem for us. Since poetry is an unfamiliar side of Euell Gibbons, I asked, and received, Freda Gibbons' kind permission to include a portion of it in this article. Of the six verses, here are the first, fifth, and sixth. It is entitled, simply,

THE SNAIL

Come listen to this little tale about the lowly humble snail.
While crawling on a log, he isn't putting on the dog.
He doesn't think, as he labors, that he is better than his neighbors,
Nor that he is a little god—he knows he's just a gastropod.

I thank whatever gods there be that such a fate was not for me—
That evolution did not swerve till man had brain and dorsal nerve—

That upright stance and flattened face prove mankind is a higher race.
I swell my chest with pride—and then—I see the works of these great men.

I look around me, and see our land with junk cars piled on every hand—
Billboards obstructing every view—a parking lot where trees once grew—
Polluted streams—eroded soil and broken dreams—
A rising crime rate—crowded jails.

Are humans really smart as snails?

Euell Gibbons soon had his imitators. *The Reader's Digest*, in 1974, carried an article on eating wild plants. That account did acknowledge Euell's work in the field; but other imitators were less scrupulous. A science magazine, published for secondary schools, carried two articles on edible weeds in a single 1976 issue. Neither article mentioned Euell or his books, even though the two bibliographies listed a total of nine related books, all having copyright dates indicating that they were published after Euell Gibbons' books began to appear.

Although Euell Gibbons' pen had earned less than a thousand dollars for him by the time he was fifty years old, he produced a tremendous output of published writings after the success of his first "stalking" book. There were, as mentioned earlier, another six foraging books, plus the Euell Gibbons Handbook of Edible Wild Plants, co-authored by Gordon Tucker and published posthumously. He also wrote about one-and-a-half dozen magazine articles for various publications, plus a regular monthly column for *Organic Gardening*, over four years.

The pen was stilled on the night of December 29, 1975, when Euell Gibbons died of an aneurism. The funeral was private, following cremation. His will left all of his personal possessions to Freda. She sold the property several years ago, and now lives in Virginia. No monument or marker has ever been placed to tell travelers that they are passing through the very lands in which a famous naturalist did much of his field work and writing. There is nothing to let them know that they are near to the former home of Snyder County's most widely-celebrated resident. Perhaps the absence of such markers is appropriate to the man's work and to his philosophy.

None of Euell's books will ever have the stature of Thoreau's *Walden*, nor will his work have an impact on conservation comparable to that of John Muir. Nevertheless, he should remain a respected naturalist for his concentration on one previously-overlooked topic of study: the worth of wild plants. Euell Gibbons—a late resident of Snyder County... and of this earth—deserves the recognition.

Trash Is My Gold, And It Can Be Yours Too!

~Chris Anderson (LHU Health & Physical Education Major)

You may not realize it, but everywhere you look there is money to be had. That old aluminum drawer your high school is throwing out, copper pipes sitting in the corner of your garage with no use, or even that empty tin can of soda. These objects all have one thing in common... they are metals highly demanded by scrap yards all over America. In the right amounts, metal can fetch a hefty price at the scrap yard. After doing this for a year and six months I have made over \$15,000. But recycling metal is not only profitable, it is "green" or "environmentally friendly" because the reuse of metal slows down production in metal manufacturing, which is a big contributor to the emissions in the atmosphere and the recycling process uses less energy than industrial manufacturing. To be a successful scrapper you must possess certain traits. In this article, I will teach you how to possess those traits and put extra cash in your pocket and help save the environment.

To scrap metal you need to be well equipped. Cut-proof gloves prevent being cut by any type of rusty metal because it is not worth contracting tetanus trying to make money. The preferred vehicle for small scale metal scrapping would be a pick up truck because you can hold more metal and be able to make quick and easy offloads but not everyone has a pick up truck so you can use any vehicle as long as your not overloading



the vehicle (Do not lean metal on your windows or they will eventually break!). I also highly recommend wearing steel-toed boots because dropping heavy metals on your foot does not feel good. When it comes to this work to be successful you will have to put in lots of hours so you should always dress in

layers to be prepared for any weather you could face.

Scrap yards are everywhere and they are willing to pay the price for good metals. The way these places operate is by recycling metals and certain materials to sell in their pure form to turn a bigger profit. Currently the three most demanded metals by scrap yards are copper, aluminum and steel. As a metal scrapper copper is like gold. My best pay

days have come from collecting large amounts of copper. Copper is broken into three categories. These include Copper 1 or pure copper, copper 2 which is copper with other metals attached, and dirty copper which is copper coated by plastic in other words wires. At the scrap yard I usually go to Copper 1 fetches \$2.70 per pound, Copper 2 gets \$2.60 per pound, and dirty copper catches \$1.10 per pound. An easy trick to make the value of your copper go up is to separate all other metals attached to Copper 2 to make it into Copper 1. Another easy trick is to take the wires that you collect and melt all the rubber and plastic around the copper to pull out clean copper in its purest form.

Aluminum it can be found everywhere. At \$.60 a pound it may not seem like much but because of its prevalence it is easy to get large amounts of it. The best way to accumulate aluminum is by saving aluminum cans. Most metal scrappers usually will accumulate large amounts of metal before going to the scrap yard so, patience is the key. I often find myself at 4 AM on recycling day in my town getting as many aluminum cans as I can before the recycling trucks come. The most cans I have accumulated and scrapped was 1,257 pounds and I made \$740.20. So think twice before you throw that empty can of soda out.

When people often think of steel they think of a large bulky metal that is almost indestructible. But when I think of steel I think of money. There are hundreds of different types of steel but I break it down into two simple categories: stainless steel and carbon steel. The difference is that stainless steel does not rust and carbon steel does. The reason why I like steel is because it is heavy and catches a fairly decent price. Stainless steel at my scrap yard sells for \$.50 a pound and Carbon steel sells for \$.25 a pound. My biggest ever pay day came from a steel run at a local farmers house who had six 500+ gallon stainless steel tanks and old carbon steel wires. The tanks weighed a total of 2,700 pounds and the wires weighed 385 pounds. It is not every day you walk out of a scrap yard with almost \$1,500 in cash!

By now you're probably wondering where you can accumulate these materials. One way is by waking up early on recyclable day and garbage day and driving around residential neighborhoods and looking for metal that people are throwing out. This could include recyclable metals such as cans, air conditioners, refrigerators, fencing materials, and etc. Almost all metal being thrown out of a residence can be scrapped. A second way is by driving around and looking for old metal stored around peoples houses and near their sheds. A lot of times I have been able to pick up old lawn mowers, gardening equipment, fencing, and etc. But make sure you ask the home owner's permission to haul away the material. One of the best ways to accumulate metals is by asking people at construction sites, farms, and places of commercial business if they need any old metal hauled away. You will often find that these

businesses will throw away valuable metals in dumpsters when in reality they have no idea what they are missing out on!

Through metal scrapping I was able to pay for one semester of college and pay for car insurance on a pick-up truck. With a little will power and elbow grease you also can be a successful metal scrapper. There is money to be made and the environment to protect!

Skeleton Cities

~Austin Miller (LHU English Major)

[An excerpt from Skeleton Cities. JT is a college student on summer break in Honolulu, skateboarding on her way to meet a new friend...]

JT passed an apartment building that was under construction. The alley between it and the neighboring structure was fenced off and the arm of a crane poked over the roof of the high rise. Empty scaffolding clung to the sides – and crawled to the top – of the building, like vines of ivy encasing an old mansion. The scaffolding was not meant to reclaim the apartments for the earth, but to further separate the inhabitants from the dirt; to make their lives more lavish, easier. She was tired of everyone wanting to build up, as if it made a difference, made the world a better place. To JT, it was the same as the difference between a wooden coffin and an ivory one. She wondered if the people inside even cared, if they thought the improvements they were promised would be worth the blaring tractors, with their diesel fumes and deep threaded tires that ripped into the sandy lawn. No, if JT lived there, she'd be angry. She didn't want to build up. If anything, she wanted to dig down – below the cement, metal and heavy machines. She would feel more at home there, with dirt and bugs and other things that had been left behind.

JT continued to roll down Kalakaua Avenue, past Waikiki Wall, until she saw stop 157 in the distance. She could tell that someone was laying on the bench. A waterfall of shiny, black hair toppled over the edge, almost touching the ground, and two stone pillars of brown arms extended skyward, holding a book. JT was 15 minutes early for their eight o'clock meeting and was surprised to see Kaia early too. Kaia sat up and turned in JT's direction when she approached.

"Hey," Kaia said loudly, waving. She smiled softly, crinkled her nose and almost winked at JT.

"What's up?" JT said. She made a fist, pointed her pinky and thumb outward and wiggled her lower arm. Kaia smiled wider and giggled as JT sat down.

“Wow,” Kaia said. “You got the shaka down already. Might as well move here.” JT knew she was kidding but appreciated that Kaia recognized she wanted to come across as someone who did live there.

“I wish,” JT said.

“Maybe someday,” Kaia said and smiled. She put her hands on the edge of the bench, leaned back and faced the sun with her eyes closed. JT aspired to the level of peace and confidence Kaia must have to shut her eyes and relax that way in front of someone she had met only two days before.

JT examined Kaia for a few more seconds in her unguarded position. Kaia was taller than most of the Hawai’ian girls JT had seen in the past week, and her build was not so different from that of Duke Kahanamoku. She had wider hips and was a little softer around the midsection, of course, but she had the same wide shoulders, lean arms, and flat feet of the statue.

“So, where are we going?” JT asked.

“China Walls,” Kaia said. The name didn’t sound familiar to JT. She was sure she hadn’t seen a beach by that name on Google maps. After JT said nothing, Kaia continued. “You probably haven’t heard of it. It’s mostly a locals spot since you have to walk through this neighborhood to get there.”

“Coolness,” JT said and nodded her head. A beach free of tourists was exactly what she hoped for. Kaia squinted and pointed over JT’s shoulder.

“That’s us,” Kaia said. “Twenty-two.”

They rode the bus for about half an hour before they disembarked and walked through a large neighborhood of gated houses where, according to Kaia, “a bunch of rich people” lived.

After 20 minutes, they exited the neighborhood through the end of a cul-de-sac and ambled out onto rocky wall 15 feet above sea level that had been terraced by ocean waves. To her right, JT could see the shoreline in the distance and to her left was completely water. They were the only two people present, and the sole sound was that of the sea swelling and falling away from the cliff face.

"What do you think?" Kaia asked.

"Dope," JT said. She wanted to flash the shaka, but her hands were occupied with holding her penny board and the fins Kaia had supplied.



"Good," Kaia said and smiled.

They dropped their gear and spread their towels on a flat area. JT kicked off her Vans, slid out of her shorts, removed her tank top, and retrieved her sunscreen from her bag. She squirted a small amount into the palm of her hand.

"Oh no," Kaia said before JT could apply the lotion. Kaia opened her own bag and pulled out a beige tube with a forest-green lid. "Use this." She tossed the bottle to JT. "That stuff is fine if you're just laying on the beach, but its kind of toxic to marine life."

JT felt like she had finally been exposed for the fraud she already knew herself to be. "I'm so sorry," she apologized, thinking all her credibility as a savvy traveler had vanished. "I had no idea."

"It's fine," Kaia said quietly. "Most people don't." JT focused on the word "people." She hoped Kaia really meant all people, instead of just using it to save her from the emotional death of being called a "tourist." JT suspected the latter, but didn't want to ask further to confirm. JT coated every part of her body she could reach with the eco-friendly sunblock, and asked Kaia to cover her back. Kaia worked slowly and thoroughly.

"So, I meant to ask you," Kaia said. "What does JT stand for? It's your initials, right?"

"Yea," JT said. She hated her given name, but there was no way to convince anyone that her initials were her full name. "Jaime Taylor. I hate it, though." Kaia was quiet for a few seconds as she finished rubbing in the lotion to JT's lower back.

"JT suits you better," Kaia agreed. "You know, Kaia is just a nickname too. My full name is Kekaianālani."

JT knew she couldn't replicate the name but didn't want to ask Kaia to repeat it. "Very cool," she said and showed the shaka. Kaia laughed.

"At least you didn't say 'beautiful,'" Kaia said. "Most people that don't know Hawai'ian just say 'that's beautiful.'"

"Does it mean something?" JT asked. She didn't instinctually think the name was anything more than an American name – Jaime didn't mean anything – but Kaia's reference to the Hawai'ian language suggested otherwise.

Kaia put her hand over her heart and tilted her head to the side with her lips pursed and eyes looking up. It reminded JT of when she leaned back and faced the sun at the bus stop. Kaia had a way of making every action she performed seem like she was acting in a movie; like she practiced these cute motions in front of a mirror to show her emotions in the most obvious way possible. Yet, JT knew it was more genuine than the way she tried not to get too excited or out-of-control about anything.

"Thank you for asking," Kaia said. "Yes. It means 'the sea of the heavens.'"

"That's beautiful," JT said with extra emphasis on the vowels. Kaia laughed. JT thought maybe her toxic sunscreen mishap wasn't so detrimental, after all.

Getting into the water was a tedious procedure. Because there wasn't anywhere to simply walk in – they had to jump at least a few feet from even the closest ledge to the water – Kaia suggested that JT wait until Kaia had gotten in and put her mask and fins on. Then, JT could throw her gear to Kaia who would hold it and wait for JT to jump in before helping her to get it on. They executed the plan without much trouble, although putting her fins on while trying to keep her head above the water was more challenging than JT had anticipated, a process that Kaia seemed to find amusing.

They swam around on the surface for a few minutes looking around. JT could see the bottom, which she thought was about 15 to 20 feet away in most places. Sandy patches, like river bottoms, ran through the many gorges and canyons of dark, jagged rocks and corals. The whole scene was cloaked in the blue-green tint of the water, creating a world completely alien to JT. She had seen underwater pictures before but had never been in tropical waters with a mask, everything suddenly tangible. She had no knowledge of this new ecosystem, and thus no control inside of it, but she wasn't anxious. The stillness of her surroundings, except for the gentle rocking of the tide, and way she couldn't hear the ocean now that she was in the ocean, were impossible for her to describe with any word but "peaceful."

They swam over a minor school of small, silver fish facing into the current to steady themselves. JT felt Kaia's hand gently brush her shoulder. JT looked to see Kaia making a thumbs down signal with her other hand before the Hawai'ian girl extended both of her arms over her head and dove toward the school, kicking both of her feet in unison. Kaia glided through the water, never moving her arms until she reached the bottom and scattered the fish, which darted in many different directions before regrouping a short distance away. Kaia turned her body so that she was looking at JT but was parallel with the ocean floor, then pulled her snorkel from her mouth, puffed her cheeks, and blew a bubble which slowly rose and surprised JT by forming a perfect ring. When the bubble ring reached JT, she stuck her arm and head through before it broke and disintegrated on her neck. Kaia smiled so wide her teeth looked like a hole in her head, through which you could see the sea bottom.

They continued to swim around for a while, JT always following behind and watching as Kaia dove to inspect the formations. Sometimes Kaia passed effortlessly through a tunnel under the rocks or disappeared beneath a coral shelf. JT wanted to dive as well but was worried about her clumsiness in the water compared to Kaia who, it seemed, could swim along the bottom without even disturbing the sand. JT could barely keep herself faced in the proper direction without flailing her arms and splashing water into the air.

Kaia stopped JT and made a thumbs up sign, to which JT smiled as much as she could with her snorkel in her mouth and flashed the same hand gesture back. Kaia shook her head and pointed up with her forefinger, then her face disappeared above the surface. JT followed. Both girls rested their masks on their foreheads as they treaded in the water.

"So, what do you think so far?" Kaia asked.

"Coolness," JT said and nodded her head. "I've never had goggles and been able to see what's beneath me like this. It's tight."

"Yea," Kaia said. "Haven't really seen much, though. A couple fish." Kaia's voice was dismissive.

"But all the coral is really sick," JT said, wanting Kaia to know she wasn't disappointed with the experience.

"But, actually," Kaia said. JT was confused. Nothing she had seen looked like it was really sick. The rocks were coated in algae and seaweed, and many of the corals reached far away from their foundations. They must have been healthy enough to grow.

“What do you mean?” JT asked.

“Ocean acidification,” Kaia answered. JT didn’t reply. “Have you never heard of it?” Kaia asked. She seemed genuinely surprised, and then excited, when JT shook her head to the contrary.

“Ok! Biology time,” Kaia said and smiled, showing her teeth. JT couldn’t help but grin too at Kaia’s enthusiasm. JT had never been enthusiastic about a science class in her whole life, but Kaia’s unapologetic eagerness was enough to make her want to know more. “So corals are animals,” Kaia started her explanation. “Or, really, they are colonies of little animals called polyps. And that hard stuff that you feel and see is its protective exoskeleton.”

“So, like an apartment building made out of bone?” JT said, just to show Kaia that she understood.

“Yea, kind of. I think of it more as like a bee hive or an ant colony,” Kaia said. “But if you want to think of it like a building it would be more of a crypt, since all those polyps are going to die. Ocean acidification happens because extra carbon dioxide in the air, from air pollution, dissolves into the water and becomes poisonous to the coral and kills them. I mean there is a lot more science to it than that, but that’s the gist of it. And, when the coral dies, the whole marine ecosystem will die,” Kaia added, almost in one breath.

“Well shit,” JT said. She wondered how she had not heard of it before. It must not be an urgent problem. “How fast is it happening?”

“A lot of scientists think that in 50 years, all reefs will die faster than they grow,” Kaia said. JT didn’t answer. She felt violated, like she had been cheated on, like she had been lied to for a long time. She wasn’t sure who was lying to her by not telling her about this, but she felt betrayed nonetheless. “Come on,” Kaia said. “Let’s just swim.”

Kaia pulled her mask down over her face and dove. JT re-fitted her mask in time to see Kaia disappear under a rocky shelf for a few seconds then emerge and swim to the surface. Kaia put her hand on JT’s waist and made a thumbs up. JT knew Kaia wanted to tell her something this time.

“Honu,” Kaia said when they had their heads above water.

“What?” JT asked. Kaia smiled.

"A turtle!" Kaia said louder. JT's stomach turned inside out. She had to go see it.

"Can I come with?" JT asked.

"Of course," Kaia said. "You probably already know this, but you can't touch them. Just look." JT nodded like she did already know. Kaia replaced her snorkel and dove, her butt and then entire lower body came out of the water before re-entering perfectly perpendicular to the surface.

JT had never been completely underwater with a snorkel before and decided quickly that she would forego it. She counted to three and filled her lungs as completely as she could before submerging herself and using her arms to pull her upper body down. Kaia was already floating upside down on the bottom, waving to JT. JT frog swam with her arms and freestyle kicked with her fins until about half way down, when her inner ears began to hurt. JT remembered she would have to equalize, like she did on the deep end of the swimming pool as a kid. She pinched her nose and blew out until the pain was relieved, then continued down.

When she reached the floor, Kaia pointed to her right, under the ledge that JT had seen her swim below before. JT turned and saw the turtle, resting, observing the two of them. She swam towards it, but when she got just to the edge of the shelf, she felt the current begin to pull her under. Her chest tightened, and JT felt the fear of physical helplessness, of being forced beneath the rock, even though she wanted to go under it originally. She flailed her hands and feet toward the turtle, propelling herself desperately away. The turtle started to raise up from its sandy bed and JT was sure she had scared it away with her embarrassing clumsiness.

She felt Kaia grab her hand and place it gently on the edge of the undercut. She looked to see Kaia making the okay signal with her free hand. JT turned back and saw the turtle settle itself down in its resting position. She stuck her head under the shelf again and felt the current push her toward the turtle, but this time she was able to hold herself steady on the rock. The panic had made her feel low on air, but she reminded herself she had only been under water for less than 15 seconds. With her hand on the rock, she could surface whenever she wanted.

Despite its near escape attempt, the turtle didn't look frightened. It watched JT lazily with one black eye, not bothering to even move its head to face her. Its scaly appearance and wrinkly neck skin made it look old and wise and, though JT knew that was a ridiculous notion, she thought the turtle must, at least, know that she presented

no danger now that Kaia had saved it from her ungainliness. JT thought she could feel the turtle's calmness float through the water, like a cloud of pollen, and take seed in her chest, not growing, but comforting, knowing there was a part of the world she didn't have to be afraid of – that wasn't afraid of her. Maybe she didn't have to dig down beneath the cities and the sidewalks, to the dirt and roots and bones, just to find a reflection of herself. Maybe she could swim down and it would be there, bedded in the sand, waiting for her to find it.

Environmental Focus Group

Bob Myers (Chair), Md. Khalequzzaman, Jeff Walsh, Barrie Overton, Todd Nesbitt, Jamie Walker, John Reid, Lynn Bruner, Kevin Hamilton, Keith Roush, Elizabeth Gruber, Joby Topper, Michael McSkimming, Stephen Neun, Jared Conti, Marcia Kurzynski, Colleen Meyer, Bo Miller, George Rusczyk, Heather Bechdel, Zack Miller, and Katie Gable. The committee is charged with promoting and supporting activities, experiences, and structures that encourage students, faculty, and staff to develop a stronger sense of place for Lock Haven University and central Pennsylvania. Such a sense of place involves a stewardship of natural resources (environmentalism), meaningful outdoor experiences, and appreciation for the heritage of the region.