

Perception

per.cep.tion, noun,

“the act of apprehending or discerning by means of the senses; immediate recognition.”

I'm a son of Pennsylvania. I grew up in a small rural town near the center of the state. My ancestors came here in 1776, and, like the people of central Pennsylvania through a dozen generations, they lived the philosophy of Thomas Jefferson: God-fearing and democratic, agrarian and respectful of the land, small farmers and artisans, devoted to the principles of civic duty and opposed to privilege, antagonistic to anything that would despoil the land.

Why Photograph Gas Wells?

The story of why I chose to photograph gas-drilling rigs begins near Harrisburg, the state capital. I was visiting a friend who had moved there from Montoursville, farther north in Lycoming County. She had just returned from a visit to her mother, she said, she couldn't stand all of the "*gasholes*" hanging around back home. "*Gasholes?*". . . . I asked her what she was talking about. "Oh yeah, they're everywhere! Guys are coming into central Pennsylvania from Texas for temporary work. They're rude, and they don't really care about what's happening there: They're there for the money, and, when the money's gone, they'll be gone too. It's called *fracking*. They're everywhere! Did you hear about the spill they had near Montoursville? The gas-drilling companies don't tell us what's in that *frack* water; they can put in anything they want without disclosing it to us, because it's *proprietary*."

The very idea disturbed me. How can an industry from out of state put chemicals into our ground without letting us know what the contents are? Our water comes from the ground beneath us. These big-money drillers are from out of town and won't have to drink our water when they leave.

This exhibit is motivated by *perception*. In the work I'm presenting, I'm most interested in various *perceptions* of the gas-drilling industry. There are no gas wells here in Cumberland County. Marcellus Shale gas is not underground here. But in northern Pennsylvania, a section that is rural, sparsely populated, politically impotent, and beyond the immediate attention of many Harrisburg policymakers, gas wells are spreading like wildfire.

I have a state-leased camp near Renovo, far up in Clinton County. For the past eight years, I've traveled to the camp about once a month to take in the beauty and grandeur of our Pennsylvania wilds. Season to season, I enjoy hunting and fly-fishing.

One of my favorite trout-fishing streams is Young Woman's Creek in Sproul State Forest, sharing a large swath of Clinton and Centre counties. The fish in Young Woman's Creek are protected. You fish under special regulations, which means the rules allow only artificial lures, and you must release the trout you catch. Young Woman's Creek is a desolate and beautiful stream that flows between tall, steep mountains before it empties into the Susquehanna River at North Bend. There is no other place like it on earth. It is a tranquil tribute to God's wondrous creations. The Western Clinton Sportsmen's Association maintains a cooperative trout nursery there. The water feeding the nursery comes from a small tributary of the creek called Laurelly Fork. When I learned in 2010 that the shale gas industry had plans to drill near the stream, in fact on top of the ridge above it, I was *afraid!* I couldn't fathom that fracking chemicals and the huge machinery of drilling might contaminate that so-beautiful place. I recognized that I had to do something to bring awareness of the danger to lawmakers and citizens who had never been there.

Online, I found aerial photographs of the drilling sites taken by Dick Martin of the Pennsylvania Forest Coalition. ([http://www.Ihup.edu/rmyers3/marcelluspictures.htm](http://www.Ihup.edu/rmyers3/marcellpix/marcelluspictures.htm)) Those photographs showed large holes in the forests. They demonstrated the colossal amount of forestland that drillers clear to begin the fracking process. It was all but impossible not to recognize the damage to the pristine forest and stream that I love so much.

The Works

The work I am presenting is about *perception*. How do we perceive these gas wells in Pennsylvania? Are they images conjured in our mind's eye fed by the limited information we have? Do we have a preconceived image of the drilling sites? How do the drilling sites relate to the landscape of the forests and streams that the Commonwealth in 2003, to increase tourism in our most rural region, designated the *Pennsylvania Wilds* – a 12 ½ -county region larger than Yellowstone, loaded with natural outdoor experiences, 29 state parks, 50 state game lands, the largest elk herd in the northeastern United States, and hundreds of miles of land and water trails. The Commonwealth publicizes it as “an attractive place to hunt, bike, hike, camp, fish, canoe, explore America’s heritage, and more.”

How do these elements of nature – forests, streams, animals – *perceive* the site? The gas well is like a parasite drilling into the earth. It nests and burrows beneath the surface, sucking the gas to serve our civilized energy needs. Are we the parasites? Or do we have the right to use the earth as we please? If we could see through nature's eye – say, from the eye of a black bear living in the forest – how unusual and intrusive would the drilling rig appear? I tried to capture, from that perspective, the images I’m presenting.

The Natural Ridge

In the calm beauty of the forest, the colors are green and blue. The daylight illuminates the landscape, saturating the forest with dazzling, brilliant, earthy hues. The "*natural ridge*" is alive: it is the Sproul State Forest you and I are drawn to for recreation, relaxation, and meditation. The forest holds regenerative powers. More than 50 million Americans live within a day's drive of the Pennsylvania Wilds. Among them, the men, women and children who visit get peace and refuge from the over-stimulated, post-modern world. The images of the "*natural ridge*" that I am presenting reflect a threatened world – the beauty and refuge of the Pennsylvania Wilds. They are the scenes that wildlife is accustomed to seeing. This is their home; it is what they experience every day.

The Poisoned Ridge

Within my camera range, the opposite ridge is poisoned, foreign to nature. From the wildlife's perspective, the gas well is an intrusion. The intruders have cleared the land, paved over the forest with macadam to allow for tanker trucks and the constant coming and going of their supplies and resources. The land is forsaken, the foliage tainted by pollution. The intruders have pushed the wildlife off the land. The uninhabitable land that once was habitat is now laid waste. I have neutralized the color of my photographs to represent the poisoned environment.

The Rig

The drilling rig is the largest intruder. When I began to investigate what was happening, I scouted out the area. I arrived at the drilling site on the *poisoned ridge* site one rainy summer night. As soon as I saw the rig, I began to take pictures. The drilling rig stands in strong contrast to the serene forest, a contrast that was greater even than I had imagined. *It's scary*. The tower rises above the treeline, its lights running vertically. You might have seen something like it in an amusement park. You were amazed: the tallest ride there towered over the rest of the park, dwarfing everything else. The drilling rig in Sproul Forest did the same. I could hardly believe my eyes as I came upon it: I began making photographs, emphasizing the scale of the well in contrast to the natural world around it. I have taken away color from the photographs of the well to show its contrast with the forest, and I have covered these photographs with stone textures to create a striking image.

Sound

The wind blows steadily high on the Allegheny Plateau. Leaves dance with

shimmering sunlight as the sway of the branches plays a soothing rhythm. Anyone who has lived near the sea has heard similar rhythms. It provides a constant, overriding accompaniment to sensory experience in the woods. The mechanical sound of the gas rig plays as an undercurrent beneath this rhythm. It's a directional sound; even on the next ridge I can tell where I am in relation to the rig's constant thumping. The wind blows the sound of it about, pushing and pulling it toward the ear. It is constant, a foreign sound from another world. Against it, the trees, the ferns, and the grasses of the forest remain green. They grew up in the peace of the forest's rhythm and they still retain their lush appearance despite the constant mechanical drone and the intermittent noise of drilling pipes dropping onto the impenetrable macadam. Sound plays an important role in the exhibit I am presenting. I recorded 24 hours of around-the-clock sound from my vantage point on the "*natural ridge*" opposite the "*poisoned ridge*." The sound from the drilling rig pierces the forest rhythms, underscoring nature's perception for the viewer. I also recorded the sounds of running water on Young Woman's Creek. The sound from the water flows endlessly, gushing across the polished stones. It symbolizes the infinite natural cycle of the days.

Video Installation

I recorded 24 hours of video from my vantage point on the *natural ridge*. I used a tripod and fixed the angle of the camera on the gas well across the *poisoned ridge*. I've created a time-lapse documentary of the scene, showing the viewer how time passes on the ridge tops. *Sunrise, Midday, Afternoon, Sunset, and Night* all play out before the viewer as the video rolls. Wispy clouds form and pass by the camera. Through all of this cycle of nature, the gas rig continues, always intruding. The platform on the rig moves up and down continuously. The noise is constant; it goes on through day and night, always constant, always intruding. In the video, I've intermixed the sounds of the stream with the sounds of the working well. In the early morning birds sing; in the evening crickets saw, unceasing. And all day, every day, in what was once the quiet forest, they compete with the sound of the rig. These sounds are an important part of the exhibit: I envision having the sound of the rig permeate the gallery, constantly thumping, emphasizing and contrasting the ever-present mechanical hum to the sounds of silence, the sounds of nature all around.

Scale of the Work

The works in this exhibit are large. Many are 50 inches by 80 inches. Many others are 30 inches by 40 inches, and 24 inches by 36 inches. The scale mirrors the magnitude of the problem. I want the scale to throw the images in the viewer's face. The drilling rig towers above the human form, as it should. The *natural ridge* photographs seek to plunge the viewer into the scene, to define, promote, and appraise the worth of the Pennsylvania Wilds, in large-scale, visual dichotomy. In reality, there is a battle raging there between

nature and industry, and we already know that nature will lose.

An Exposition of the Facts Underlying The Exhibit

In 2003 the Commonwealth of Pennsylvania created the *Pennsylvania Wilds* to increase tourism to the state's Northern Tier counties. What was then an expanse of natural beauty and a playground for the outdoorsman "larger than Yellowstone" is now being diced up by out-of-state gas-drilling companies. The dramatic change in the wild landscape is astounding. When I visited the XTO drilling rig on Dry Run Road near my fishing camp in Clinton County, I saw firsthand how much forest the drillers have cleared and covered with asphalt. I drove onto a newly macadamized pad the size of three football fields that the driller had just paved. The Department of Conservation and Natural Resources told me that there were "no plans to rip up this pad, it will stay there." There are actually two pads on the site I visited. That equals an area of forest the size of six football fields converted to asphalt on this one site! I was amazed to see that, directly across the street from the drilling site, there was a cabin. Imagine the great times enjoying nature the vacationers who used that cabin had experienced – and now they have a huge, paved industrial site as their front yard.

I know we need energy, but I know that alternatives are available without putting our natural resources at risk. Even in the Northern Tier counties the coal industry has been there and done all this before. We have been dealing with its destruction of the land and its pollution of the water for a hundred years. Only in living memory, and under federal law, have we made progress cleaning up groundwater and the Susquehanna River. Now this new industrial intruder threatens to send us back to the days of King Coal. Now, as then, the political power of energy companies is strong. In his election campaign Pennsylvania Governor Tom Corbett took more contributions from the gas industry than all his competitors combined. Once in office, he quickly reopened state land to gas drilling and said regulation of the industry had been too aggressive. The byword here is "*Pennsylvania's Open for Business.*"

Hydraulic Fracturing and Ground Water

Pennsylvania, in fact, is considered part of the Northeast's "Cancer Belt." It earned that fatal distinction because of all of the carcinogens that the coal industry released into our water, soil, and air. There are some still alive who can remember seeing niagaras of black water gushing from the coal washeries into Pennsylvania's rivers and streams.

It takes 5.6 million gallons of water to frack one gas well – a niagara once again. (*Chesapeake Energy Marcellus fact sheet 2010*) The industry admits that 20 percent of this contaminated water finds its way back to the surface. About 2,000 natural gas wells have been drilled this way in Pennsylvania to date. The fracking process uses a high-pressure mixture of water, chemicals, and sand to fracture the previously impermeable layer of the earth. That's 11.2 billion gallons of water used to frack. Twenty percent of that reaches the surface for reclamation, or about 2.25 billion gallons. Under environmental-protection codes drillers must deal with the contaminated water somehow, so they pump it into huge frackwater retention ponds and leave it to evaporate. When it does, the drillers pump the residue out to trucks that will carry it to be reclaimed at sewage treatment plants along the Susquehanna River or, in some cases, as far away as Ohio where contractors pump it into underground wells. In that transit, there have been spills, and the undisclosed chemicals have spilled along the road and into our streams. We are only kidding ourselves if we think that is not harmful to our environment and to our children's health.

Even so, besides the spills at the surface, it's important to recognize what's happening underground. The drillers must punch their hole a mile deep to extract the gas they want. The gas-drilling industry tells us that it protects its wells with multiple layers of steel and concrete. But those safeguards seem no match for the power of the earth's dynamic, ever-shifting, crust. Thinking about the history of other assumptions and assurances – especially by energy companies – should we assume that contemporary precautions will stand up to the test of thousands of years?

Earthquakes

Already, disturbing indications suggest the opposite. A study by the United States Geological Survey has found that the recent unusual number of earthquakes in the Northeast is directly related to the fracturing process. It shows that, as gas-drilling fracturing increases, the number of earthquakes we feel in the northeastern United States increases. <http://cbc.ca/news/canada/story/2012/04/17/environment-fracking-earthquake-studies.html> Last New Year's Eve a magnitude 4.0 earthquake in Youngstown, Ohio, was blamed on the injection of high-pressure fracking water along a seismic fault, a phenomenon also documented in Arkansas and Oklahoma.

Propaganda and False Ideology

Energy independence must start here in the United States, but there are many alternative energy sources. If we were able to direct as many dollars to renewable energy as we have paid to develop and extract the energy of gas from Marcellus Shale strata, we could develop powerful and renewable avenues more quickly. But Big Money and Big Business, like Halliburton, whose trucks I saw at the site I documented – the same defense contractor that helped push us into the Iraq war in a quest for

control of the Middle East's oil supplies – stall any such initiatives. Halliburton's former chief executive and the Vice President of the United States, Dick Cheney, in 2005 successfully campaigned to exempt drilling companies from federal safe drinking water statutes, so they are not required to list the chemicals they push down their wells. As was true in the nineteenth and early twentieth centuries when Big Money raped the land and reaped the profits from Pennsylvania's coal, the intruders aren't from the Pennsylvania Wilds; they are corporations seeking, once again, to rape our pristine lands and take our gas for profit. When the money is gone, they will go back to Texas, or their next drilling site, and leave us with spoiled water supplies and cruelly scarred landscapes.

They have taken great pains and spared no expense to put forward a false proposition that the industry is good for Pennsylvania's rural economy. I watch the Harrisburg news channel. On that channel, I see advertisement after advertisement telling me that Marcellus Shale drilling is good for Pennsylvania. The ads introduce the testimonials of rural leaseholders who say forthrightly that life was hard before they leased their land – subsistence farmers could barely make ends meet – and now it is good. The ads portray the city of Williamsport as a quaint small town benefiting from the gas-drilling industry. They say the steel industry is being revitalized to service the gas industry. This advertising propaganda is broadcast every day and night during Harrisburg's television news programs. But most viewers here in the state capital don't even know what a drilling rig is – or what is involved in the fracking process and the risks associated with it. They haven't seen the thumping rigs on the vast paved-over fields of macadam as I have. Here in Harrisburg, it's "*Out of sight. Out of mind.*" The advertisements implicitly assure viewers that fracking will never happen here; that it's stimulating the depressed economies of Pennsylvania's faraway Northern Tier counties; and that it will create jobs and bring energy prices down.

But when I ask in Renovo if they see any commercials like this, the answer is, "*No.*" There are none. That should tell us something. The people of Renovo tell me that there are not many jobs being offered to local workers, that most workers come in from out of state and leave when the drilling is done. After all, it *is* a temporary job. Renovo residents tell me that they don't see any stimulus to the local economy; they feel their land, the land roundabout, is being used and misused. For landowners, it must be hard to turn down huge royalties for leasing their land to drillers. Imagine it for yourself: you've been living in the Pennsylvania Wilds all your life, away from the work and income of cities, and subsisting in near-poverty conditions, paycheck to paycheck, true to the heritage of Jeffersonian democracy. Then gas drillers tell you, "All you need do is sign some paperwork and we'll give you a great deal of money in royalties when the gas starts flowing." *That's a no-brainer!* The Northern Tier region has been economically depressed since the logging and railroad industries faltered in the nineteenth and twentieth centuries. And what did those industries do? They built up towns in isolated areas of the state, took the money that was there to be had, and then were bought out or

went under. They left these people, isolated from the rest of Pennsylvania, to survive on their own without the railroad, logging, or mining industries that once were part of their towns. You can see the picture on the rusting railroad tracks of Renovo. That is exactly what will happen again. Once again an industry without local roots is preying on the Northern Tier region, using its people and resources for the short-term. This isn't a sustainable local economy; it's boom then doom.

That realization underlies my presentation. That knowledge of the past and appreciation of the present beauty is the basis for my work.