

Table 2.1 From the Amateur Scientist's Notebook by Jesse DeLong

| Gas                               | Activities Causing Emissions   | Where Effected   |
|-----------------------------------|--|--|
| Carbon Dioxide (CO <sub>2</sub> ) | primarily fossil fuel burning, secondarily deforestation                     | Reginald has worked on a logging outfit for a little over a decade. When he was in his twenties, though, he foremaned on a hot shot crew called The Helen of Troys. On this crew, Reginald and the other men navigated the burned up bottoms of forests around the Pacific Northwest, hacking through old growth, lighting backfires in huckleberry brush. Now, when the sun goes down, late in the evening, sky fumes around his house and he begins to sweat, absentmindedly reaching to where a hatchet used to hang on his overalls. Everyday he drives a Backhoe through a section of land clear of trees so that the remaining stumps look like the stubble on a man's face. He drinks RC Cola in the heat and thinks it unusual he used to ache up a mountain after an aspen grove, and now can barely stand to sit on a felled sequoia at lunch. His crew, he knows, will shortly turn his seat into a two by four. Some people chase a fire long enough the heat consumes them. |
| Chlorofluorocarbons (CFCs)        | refrigerators, foam insulation and packing, previously spray cans—now banned | Wearing a fishing cap with a treble hook snared in its mesh, Reginald's son, Marcellus, sprays a ladybug with a can of Lysol. In a puddle of chemicals the bug writhes. Marcellus flags over the insect, leaning back and forth so his shadow swallows and regurgitates it. Across the yard, Reginald is dumping a busted refrigerator into the back of Jerry's truck. Jerry is the boy's uncle, younger than Marcellus' father. A couple of nights ago, Jerry climbed into the boy's window. It was three a.m. and he was drunk and had mistook the window for that of his sister-in-law's office. When Marcellus opened his eyes, he smelled perspiration like Lysol, and he saw Jerry's face, strained and pale, his belly smeared against the sill. Jerry flicked his arms and legs, struggling to gain ground. Marcellus drops the spray can. Be quiet, Marcellus says, leaning his lips near the ladybug, You don't want to wake your father.                                      |

Methane  
(CH<sub>4</sub>)

rice paddies, ruminant animals,  
coal mining, natural gas leaks,  
landfills

Standing at the kitchen window, Jerry seams apart curtains made from an old tablecloth. He holds a bologna and mayo sandwich, though he hasn't taken a bite, but is instead panning across the field at the landfill. Sunlight fumigates over steel cars, refrigerators, and empty spray cans. Above the piles, clouds look a greenish grey. When Jerry was a young GI stationed near Hanoi, he stalked along a marsh, beside rice paddies, and smelled through leaves the aroma of a trash bag's plastic lining. From the rice stalks, a Vietcong sprouted, arms raised. In his hand a silver sickle mirrored the foliage. If Jerry hadn't stopped to sniff whatever chemical fled over the water, the blade would have plucked his temple, but instead hit the sergeant walking beside him. Jerry curtained the sergeant in his arms and blood oiled in the man's stubble. In the field across from Jerry's kitchen window, a cow chews regurgitated grass. Jerry thinks cows are disgusting creatures and he can remember (a few months after he was shipped home with half of a hand) working as a coal miner in Beulah when an angus wandered into the road. In North Dakota, roads could lead everywhere and nowhere and in some places he'd be lucky to see a house every fifteen miles. When he hit the cow, his foreman was riding shotgun. The cow was kept by the man who outfitted their mining operation, and both Jerry and the foreman knew, if reported, the worth of beef would be taken out of their pay. Tired from working the brunt end a seven on stretch, they loaded the steer, heavy as several refrigerators, into the truck bed and drove into the mountains. They delivered the animal into an abandoned shaft, listening to wind gather friction over the cow's body like the whistle of coal worker who's happy he's not starving.

Nitrus  
oxide  
(N<sub>2</sub>O)

nitrogenous fertilizers, burning  
fossil fuels and biomass

Jerry sits on Reginald's tractor, eating the lunch his sister-in-law made, looking out over the land their father allotted to the oldest son. Past the sweet potato rows, mountains rototill blue sky. Above their ridges, a cowtail of cloud stretches. For the last three hours Jerry spread fertilizer, his shirt browned from sweat. When he bites the sandwich, he tastes exhaust and he turns off the ignition and waits for the fumes to clear. While a GI, he once stepped into a village and was suddenly hit with a white phosphorus bomb. For a moment, the smoke was so thick he could feel it in his ears. In the field that morning, the tractor kicked up enough dirt that he had to wrap a handkerchief around his mouth. When he stopped the tractor his tongue was still coated in dust. Taking a bite of his sandwich, he tastes dirt and processed

pork, and remembers in Hanoi how the smoke cleared, and he heard an explosion: the collapse of huts, water trenches tipping over, oxen and roosters scurrying into brush, men exposing noise from their throats. A fertilizer bomb will turn a moment into corpses and those too severed to be sent home were planted into the Hanoi soil. Often now, Jerry dreams that his friends shoot up, half-human, half plant material, and live among the villagers, eating stones and straw, drinking pond water beside oxen. They are waiting out their kind's extinction. Jerry starts the tractor and its engine shutters. A platoon of birds, so large they cover the canopy, lift from the field and demand the sky.

(Adapted from *Environmental Values in American Culture*, Chapter 2)