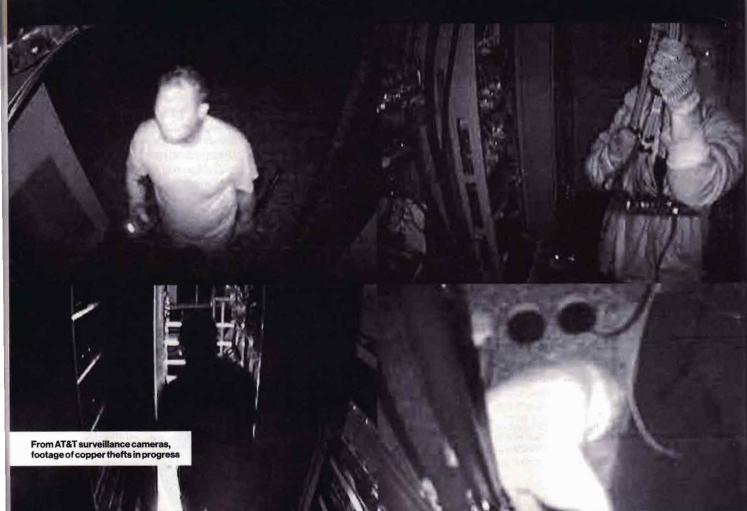
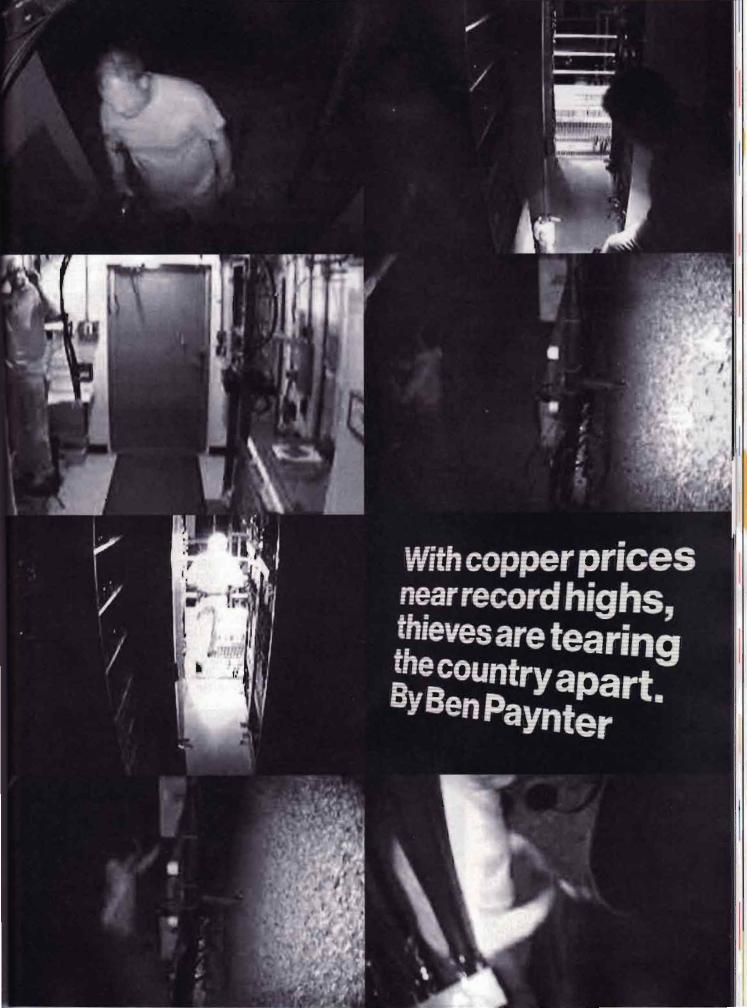


SELLING AMERICA SELLING AMERICA FOR SCRAP







or almost a year, Mid City Recycling operated out of a cavernous warehouse next to a liquor store on South Industrial Boulevard in the seedy south side of Dallas. The startup seemed to have popped up out of nowhere. Out front there was a sidewalk sign with a Mexican flag letting everyone know that the proprietors spoke Spanish. Beside it, a small truck draped with a banner read, "\$We Pay Big Bucks\$." There was no need to say for what.

For five weeks during the summer of 2009, undercover agents with the Dallas Police Metal Theft Unit watched Mid City. One at a time, they pulled into the rutted parking lot in unmarked sedans or SUVs. With tiny spy cameras attached to their shirts, they lugged in buckets of insulated electrical wiring and suspiciously stripped transmission lines, threading past dunes of scrap metal piled high enough to block out the ceiling lights far overhead. The metal was weighed on a small scale and the transaction finished at a glassed-in cashier's window.

Afterward the footage was reviewed by Lieutenant Richard Dwyer, then the unit commander. "This is a great picture of the roof," he said when one of the men returned with useless footage from a poorly angled camera. They kept filming. Dwyer wanted proof that Mid City was functioning as a black market. If they could find that proof, they would be slightly closer to bringing a crime spree under control.

Dallas, like many cities, was being rocked by copper theft. That might not sound as threatening as bank heists or murder sprees, yet the scope and frequency of the crime threatened to disrupt a far more important target—the wiring and plumbing that makes up the

central nervous system of the city itself. And Dallas was, and is, not alone. Thanks to a boom in the copper market, city services around the country are being hit, leaving law enforcement agencies nationwide scrambling to understand the scope of the problem and to confront it.

Copper, a metal with high thermal and electrical conductivity, is the essential ingredient in power lines, heating and cooling pipes, and grounding wires—the basic components of the modern world. If power lines get stolen, roads go dark. If cell towers get raided, calls get dropped. If electrical substations are knocked over, power goes out just about everywhere, including at police stations.

All of that happened in Dallas: Between 2002 and 2007, reported metal thefts spiked almost 1,000 percent, to 3,339 per year. That number dipped in 2008 but was still around 2,400. Using a toolkit of wrenches, work gloves, and power saws, crooks were dismantling the city—even prying bouquet vases out of local graveyards. "They used to say thieves would steal anything not nailed down," says Dwyer, who ran metal theft field operations from spring 2007 until late fall 2010. "Now even if it's nailed down they want it."

Since 2001 the price of copper has gone from less than \$1 per pound to about \$4 per pound on the Comex division of the New York Mercantile Exchange. In response, looters and scavengers nation-wide are stealing copper where they can. Within the last three years, copper thieves have disabled 130 cell tower sites across 17 jurisdictions in eastern Virginia and North Carolina. They stripped the wire from an

airplane control tower in Ohio, endangering in-flight communications. They scuttled the irrigation system of Pinal County, Ariz., causing \$10 million in damage and ruining a harvest. In Indianapolis, gutted refrigeration systems cost the state's largest food bank \$400,000 in spoiled rations. In Jackson, Miss., thieves stole the copper from five storm sirens, which then failed to warn residents of an incoming tornado. In Kansas City, Mo., power outages due to stolen wire caused a credit union to freeze bank accounts, while a separate group allegedly used a backhoe to excavate 18,000 feet of backup power lines worth at least \$500,000. In western Nevada, bandits on four-wheelers took out signal and control systems from Union Pacific and Amtrak rail lines. In Minneapolis and Cincinnati, police say gangs use foreclosure lists like treasure maps, looting pipes from hundreds of homes, some of which exploded from gas leaks.

The biggest cost isn't what's being taken-it's fixing the damage. "For every dollar stolen, it's \$10 to \$25 worth of repair," says Ralph Anderson, who helps utilities protect their property as a risk specialist at North American Electric Reliability, an industry consortium. In 2008, according to a survey by the industry-sponsored Electrical Safety Foundation International, utilities experienced an estimated 50,193 incidents of copper theft nationwide, resulting in an estimated \$60.4 million of damage. (An informal search of local news headlines nationwide turns up dozens of would-be thieves electrocuted while trying to steal live lines.)

A 2008 FBI report, Copper Thefts Threaten U.S. Critical Infrastructure,

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Detective Gamez surveys the inventory at Claxton Recycling in Dallas

warned that the persistent, widespread theft "presents a risk to both public safety and national security." The biggest problem, says Eric Ives, special agent for the Bureau's major theft program, is that any recovered material is often untraceable. In order to prove something is stolen, "you have to have a victim, to prove where the copper came from," Ives says. "If you don't have a victim, you don't have a theft."

Guarding an entire country, or just a city, is expensive. In California a group of police departments built a scrap yard to use as a front for gathering contraband and tracking shady vendors. Total cost: \$255,000 for 140 suspects. And that was only a stopgap.

Dallas doesn't have that kind of money or manpower. Formed in the mid-'90s, the Dallas metal theft squad mostly consists of a commander and four agents, though they're operating with just three agents now.

An early problem with detecting stolen copper, in particular, was figuring out where it came from. "There is always stuff where you say, 'What the hell is that?'" Dwyer says. To help understand what was going on, the crew pulled some of the smarter cops off their regular burglary or homicide assignments. Most were independent guys who liked the idea of working in street clothes on their own projects. Together they figured out that many metal parts have casting marks, small imbedded brands

that name the manufacturer. They started sending pictures of each unidentifiable item to the manufacturers asking for descriptions of what certain products were used for and where they were supposed to have been delivered. "Eventually, just like a neighborhood patrol officer, you learn what looks suspicious," says Dwyer. It took years to become competent. When they spotted a trend, the metal unit would alert patrolmen about what sort of break-ins to be on the lookout for or how to spot homegrown chop shops; crooks, for example, like to melt the insulation off wire, so it helps to look for burnt barrels or acrid smoke.

In early 2008 detectives started to focus on scrap yards, where stolen copper may be turned into cash. One weapon was a new piece of policy: In May 2008 the city revised City Code 40-B, which deals with secondary recyclers, giving the police power to inspect once-private secondary-metals shops. (Secondary metals are recycled metals.) Dallas recyclers had to tag and hold incoming copper for at least five days for police inspection. The cops could remove and investigate any item for up to 60 days if it looked suspicious.

At Mid City, each suspicious item dropped off by the undercover agents was marked in green paint or with a series of unique crimp marks. (Mid City did not return calls and e-mails requesting comment.) By the time police inspectors with proper badges showed up for scheduled visits to look around, they noticed that many of the items were stashed away and some had disappeared altogether. The trick was showing that this was something more than bad management.

Dwyer had a plan for that. Yards are required to check and record IDs of sellers, so in early July he handed one of his officers, a well-muscled man in his 40s with a shaved head, an ID card for a man named Felipe Rodriguez. The alias on the ID was a skinny kid about half the man's age. The officer seemed skeptical as Dwyer issued his order. "Next time you go in," said Dwyer, "let's push this to see how far out of whack they really are."

On July 8 the incognito officer used his bogus ID to make a sale. The clerk wrote up a receipt as usual, and the cop left with the proceeds. Five minutes later, though, the officer returned to the store thinking his cover was blown. In his nervousness, he had forgotten his ID at the counter.

"Felipe?" The cashier asked, cracking up.

"Sí," said the officer.

"No, not you," the clerk said mockingly as he passed the card back so they could keep doing business. Finally, the metal squad had its case.

The copper problem is, of course, one of supply and demand, and the quantity of theft tracks the price on the markets. Right now the supply is in

BUSINESSWEEK PHOTOGRAPHS BY JARED MOOSSY FOR BLOOMBERG

the U.S. and demand is in China. American demand for refined copper peaked at about 3.3 million metric tons in 2000 and has dive-bombed since, to an estimated 1.8 million metric tons in 2009, according to the Copper Development Assn., a trade group for the copper industry. China, meanwhile, crossed the 3 million-metric-ton threshold in 2003 and has increased consumption by 15.5 percent a year since, mostly because of massive building projects like the Beijing 2008 Olympic Games, and booming industry, according to John Mothersole, a metals analyst at IHS Global Insight.

In 2009 the U.S. shipped an estimated 843,000 metric tons of used copperenough to make about 18,000 Statues of Liberty-largely to China. For the first nine months of 2010, the U.S. has shipped 20 percent more than it did during the same period a year earlier, according to the Institute of Scrap Recycling Industries, a Washington-based trade association that represents recycling yards internationally. About one-third of all copper goes toward pumping out flat screens, smartphones, and iPads that are then shipped worldwide, mainly to Americans. Much of the rest goes to building China's own power lines, cell phone towers, and heating systems.

"There has been tremendous growth while there is tightness," says Mothersole. "The former peak is now the floor, and we'll continue to see record gains." Last December copper futures reached a 30-month high of \$4.03 a pound on the Comex. Lannie Cohen, president of Capitol Commodity Services in Indianapolis, estimates the price will reach \$5.08 in 2011. The U.S. produces about 31 percent of the world's total secondhand copper supply, according to Mothersole. Internationally, that secondhand supply accounts for 16 percent of all refined copper being used in manufacturing. Mothersole calls all that "the aboveground mine."

For the copper pirates, there's plenty more stuff to jack. Bob Garino, commodities director at the Institute of Scrap Recycling Industries, estimates a surplus of 125 billion pounds sitting around in unoccupied developments, blighted buildings, and discarded consumer products. That increases by about 1.8 billion pounds per year, he says. Until now there hasn't been ample incentive to go get it. "One feature of scrap is the price is elastic,"

Crooks carry cell tower maps like treasure hunters

says Garino, meaning that people don't bother to steal copper when it's cheap. "You bring in a lot more at \$4 a pound."

The more a scrap yard processes, the more it profits. In this way, Dallas' 22 scrap yards resemble another venerable Texas institution: cattle feed vards. Smaller lots sell to midsize lots, which sell to bigger yards. In the cattle world, cows get fattened at each stop before butchering. In the copper trade, something similar happens. The metal is generally cleaned, stripped of insulation, chipped into smaller pieces, or baled into bigger bundles for easier transport. Much is sold to exporters operating out of Houston or Galveston, both less than 300 miles from Dallas. When it reaches China, it is generally refined and put back into production.

On a recent mid-October afternoon at Action Metals, a scrap yard in south central Dallas that operates out of a lot the size of a sprawling suburban backyard, Dwyer appears for a routine inspection. At the yard that day is a trio of Chinese investors who have showed up to discuss shipping directly to China.

Sporting Prada glasses, Action's debonair manager, Boris Grinstein, says most of Action's copper comes from plumbers and electricians who are making spare change off job leftovers, as well as a few street peddlers who scour the streets for discarded junk they can sell to help stay afloat. "We are very very open with the police," says Grinstein. "Everything that comes in here we show them. We are the first people who don't want to buy [stolen goods] because it puts a bad light on us." Dwyer agrees, noting that good shops help collar crooks while taking credit for the busts.

During the inspection, Dwyer, in uniform, watches a service worker pitching huge handfuls of speaker wire into a screeching metal granulator the size of a Volkswagen. The Strip-Tec 400 costs \$67,500 and chops the wire into glittering specks that move along a small conveyor belt. It can process up to 475 pounds per hour. Everything spills into a bucket

that is pitched into a larger metal drum. This is why the theft unit wants to inspect copper at the first point of sale. Over the hum of the machine, Dwyer shouts, "Once it gets into yards and gets processed, it becomes invisible."

A few months after the sting at Mid City, Dwyer presents his case before the city's Permit and License Appeal Board, a council made up of local business owners. The yard has racked up 18 different administrative violations, including allowing sales with improper identification and piggybacking multiple transactions onto the same receipt to conceal sellers' identities. The police choose to appear before a public board rather than a criminal court because the burden of proof is easier. Felony convictions for taking in contraband require each purchase to be worth \$1,500, and officers have to blatantly state while working undercover that the goods they are hawking are hot. Do that enough, and criminals tend to get suspicious. Also, because jails are overcrowded, first-time felony convictions often result only in fines or probation.

Dwyer wants a 30-day business suspension. The board settles on 15 days. The financial impact on Mid City is hard to determine because the police don't know how much illegally obtained metal they move. Dwyer doesn't like to speculate. "How much is moving though undetected? By definition, 'undetected' means you don't know," he says.

The yard, however, will have to hold whatever it has. "That's where it hurts them," says Dwyer. The severity of each suspension, of course, hinges on a force beyond everyone's control: the market. So far Dallas has suspended three other salvage yards for a few days each for trafficking violations. While that may slow the tide of stolen product, it's raising the ire of metal trade organizations that think the government has no business regulating private businesses. "It's just a huge nuisance," says Garino at the Institute of Scrap Recycling Industries, which has started a website to let police,

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industries, and yards share information about missing material. "The companies that rely on peddler trade are getting this mixed bag of material they need to sort through," he says. "The last thing you need to do is park it on the side of a lot for days," especially when prices can shift up to 20¢ a day. "That's a huge cost to the small scrap processor," says Garino. Dallas' scrap monitoring board seems to agree. As with his Mid City case, most of Dwyer's suspension recommendations are cut in half.

The new regulation has helped the metal theft unit expand its detective work in other ways. The ordinance requires scrap yards to keep photos of sellers with both their merchandise and their cars, which offers a nice Rolodex of potential perps in possession of stolen goods and vehicles. "It's common to find that the person selling has a criminal history of some type," says Dwyer.

It's likely tens of thousands of so-called transaction photos now exist, though all are held separately at individual scrap yards. Now the unit can start at the yard and work backwards: Figure out who brought the suspicious copper in and where they got it in the first place, and you have your victims—and your case.

On a chilly fall morning, Dallas detective Jerry Gamez and his partner, Jim

Action Metals in Dallas; a Claxton customer awaiting his paperwork





Winkle, arrive for a routine inspection at Claxton Recycling, a midsize depository that manager Sue Benton says processes about 500,000 pounds of copper each month. Benton describes her relationship with the metals unit as "absolutely a good one," and even hangs a Dallas police department jacket off her office chair.

Still, this is where the metal goes, so the police are there. The detectives don work gloves and pick their way through rows of metal-filled laundry bins inside the hangar-size storage room. Gamez wears a shiny belt buckle, a vest to conceal his gun, and a dusty Rangers cap. Winkle wears aviators and a gun in a hip holster and chews a fat plug of tobacco. Neither has fired his weapons while on metals duty, though they have had to chase suspects and wrestle them to the ground. Not that they always spot the bad guys. "About 80 percent of what is out there is legitimate," Gamez says. "The other 20 percent we have to find. I'm looking for that 20 percent-and of that 20 percent I'm lucky if I can find two things."

Both are serious about improving those odds. Back at the station, the crew has pushed desks together to form a long countertop. While the burglary and homicide desks in other parts of the room are covered with fitness or gun magazines and have a nice view of a flat screen tuned to ESPN, the metal detectives spend hours poring over an evidence locker's worth of recovered sprockets, levers, and cables spread across their desks. The detectives are trying to figure out where each piece comes from and what it might look like if hastily removed. Do that long enough and you start to view the city differently. The metal theft unit now knows the function and street value of any set of overhead lines based on their height, arrangement, or thickness. They can tell you which buildings might be easy targets-like small churches, which may only be occupied on Sundays-and which protective measures are generally worthless. Boarding up a building, for instance, makes it harder to spot the bad guys gutting it after they get inside. Some of the team's desks sport Iron Man action figures, a badge of honor that veterans give out to recruits who learn to "talk metal."

At the Claxton yard, Gamez scans the shiny wasteland. He considers checking

out an uprooted lamppost but can't; the inspection period has expired. Gamez shrugs. Sometimes good leads get buried—literally—in the piles of debris. He settles on a bin of roughed-up piping. "See how it's all scratched up?" he asks. "Someone used a vice grip to break this—that's not the proper tool." When a clerk traces the bin number, they learn that the load came in at 4:22 p.m. the day before—41 pounds worth \$1,389.30. After they pull out a picture of the seller and his pickup truck, a scale operator recalls that the seller claimed it was refrigerator coil found in a dumpster.

During the inspection, Gamez works the room like a jovial bartender. "Layla? I got work for you!" he says when he needs a record. "Clemente! He's a scale guy! One of the best!" he adds when he gets some nice bit of intel. It might not seem necessary, but a good rapport is a must. "You want them to respect you so much that they comply with the rules even if you're not around," he says.

When Gamez gets back to the office, he will check out his suspect's work history and address. Then he'll call former employers and rummage through police reports to see who around the suspect's neighborhood might have been robbed or if the truck was reported as a suspicious vehicle somewhere.

Private companies like enforcement to start at the yards, too. In the Dallas area, AT&T prints serial numbers on coated lines and marks grounding plates on cell towers with ultraviolet ink that can only be spotted with a black light. Oncor, the region's largest utility, has experimented with nanotechnology to brand transformer coils with microscopic bar codes that won't scratch off. Those measures are meant to help police quickly trace parts to where they were installed and deter thieves from messing with the utility's copper.

The new, yard-based approach to solving copper theft is paying off. A recent sale at Claxton was tracked to someone who had created a fake work order to unload 99 reels of insulated copper for \$14,877. "I know I didn't do anything wrong. People get the wrong picture that we are buying stolen material knowingly. We hold everything for the detectives," says Benton, letting the police make the choice about what's suspicious. In this way, she explains, it helps the buyer as much as the seller. "They help me stay out

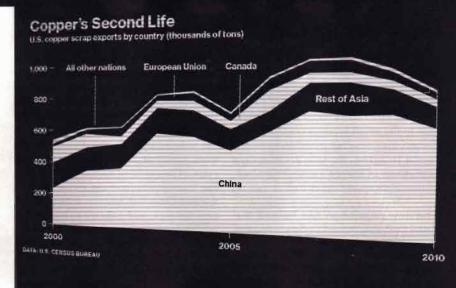
of it because I don't want to accuse the people who come in of stealing." At another yard the unit nabbed two guys trafficking their plumbing company's piping for \$6,256.

Dallas' focus on the problem has produced a model for other cities. While the metal unit cracks only about 10 percent of reported cases, there has been improvement in the overall numbers, partly because of some new state sentencing guidelines. In 2009, Texas made it a felony to interrupt any public utility or transportation line, or to possess stolen copper tubing or condensers. In April 2008, Dallas was averaging more than 300 reports of metal theft per month. In 2010, reported thefts are running about 130 per month—still about four every day.

Plenty of suspicious sales continue to get through. Gamez scoffs when he inspects one suspect's buying history. Over the last month the man has conducted 10 separate transactions worth a total of more than \$10,000, all during business hours. It's the profile of a true scavenger: works alone, probably unemployed, opportunistic. "Will they catch him? Probably not," Gamez says. "We'd have to follow him around all day long, and we just don't have the manpower."

Meanwhile, those blind spots have opened the door to some privately funded reinforcements. In 2006, AT&T partnered with a copper-specific video alarm company in Dallas called Videofied. When tripped, a battery operated camera sends 10 seconds of video footage to officers over a cell signal. It can operate even if the power and phone lines are cut.

Mike Korbuly, vice-president of SNC Security, who responds to incidents in Dallas for Videofied, has caught bad guys carrying their own cell tower maps, a takeoff on the foreclosure list treasurehunting scheme. Standing beneath a cell tower in the middle of a field in north Dallas recently, Korbuly notices the ultimate endorsement. The grounding wires for two other cell companies located at the tower are missing. His are not. "People are starting to learn that AT&T is protected," he says, eyeing an empty beer can the thieves might have left behind. That's helped AT&T reduce service cuts by 75 percent nationwide in 2009. In 2008 those incidents cost \$7.3 million, vs. \$2.2 million in 2009. An-



other Dallas company, CopperWatcher, provides air-conditioning unit alarm systems that trip if there are spikes in voltage, a telltale sign of tampering.

Dwyer doesn't think too much about Mid City anymore. The yard went out of business last spring after the police clampdown, and he's working in a different division now. He's also teaching the Dallas model to other jurisdictions. He recently helped Orlando design a system that requires all yards to pay customers via check in an attempt to slow down drug users seeking cash for a quick fix.

That rule hasn't passed in Dallas. Although Dwyer suggested the city include such a plan in the new ordinance, the city council decided to sponsor a lighter "cash card" addition to ordinance 40-B. The first payment for each sale is mailed by the yard to the seller, along with a yard-specific ID card to help track future cash sales. Dwyer has been traveling to Austin to testify for stronger state legislation, and he has opposition. Last year many of Dallas recyclers helped form the Recycling Council of Texas, a lobbying group to oppose moves like statewide no-cash sales.

The biggest problem facing Dallas, however, is that crooks don't have far to commute. Two blocks outside the southern city limits, and Dallas police jurisdiction, there is a junkyard that hoists and sifts metal across a mini-mountain range the length of a football field. Trucks loaded with scrap metal are usually backed up in the delivery area. They have picked up a lot of new business.

Although some personnel have been reassigned-police work has been hit by the economy, too, says Winkle-the metal theft unit keeps on. By November, Dwyer and one of his detectives had been moved to other divisions, and another officer is slated to retire soon. Until more are assigned to the unit, that will leave just Gamez and Winkle to split up and inspect all the city's scrap yards. Gamez isn't excited about the prospect of snooping around solo. "If some of these buyers have stolen property, that makes them felons," he says. Gamez likes having backup. Winkle agrees. Now he's pleased they get to roll in plainclothes and unmarked police trucks. At each yard, Winkle parks his truck carefully so he has a good view of the operation. He tends to chuckle when other cars honk; they often think he's another peddler trying to cut in line.

Back at the station, Gamez fields a phone call from a man screaming that his house has been stripped of copper. He wants a full-scale investigation and a translator to interview some neighbors. (He hasn't given Gamez a chance to say that he's bilingual.) Gamez puts one hand over the end of the receiver and calls over to Winkle. "He wants to monopolize my time," he says. Winkle leans back, spotting the prize trophy in their evidence stash, a larger-than-life copper John Wayne bust. He spits a plume of tobacco into a plastic cup and chuckles. "He won't," he says. The guy's copper is probably already at a metal yard. Now they just have to go find it. B