

# gallery



## JAMES G. LEWIS ON SMOKEY BEAR IN VIETNAM

SMOKEY BEAR DEBUTED his slogan “Only you can prevent forest fires!” in 1947. The bear and the slogan both quickly achieved iconic status, giving the U.S. Forest Service’s forest fire prevention campaign an enormous boost. Featured in a tremendously effective public service campaign, Smokey soon became the second-most recognized symbol in American culture, after Santa Claus.<sup>1</sup> In 1962, Smokey became the unofficial mascot of Operation Ranch Hand, the military’s largest defoliation project during the Vietnam War. The project, which became operational in 1962 and ended in 1971, used Agent Orange and other defoliants to open up the hardwood jungle canopy to expose enemy movements. It was most likely a pilot that modified Smokey Bear posters to read, “Only you can prevent a forest,” Ranch Hand’s motto.<sup>2</sup> Posters were placed around the Ranch Hand buildings at the training grounds at Langley Air Force Base in Virginia, Hurlburt Field (Eglin Air Force Base) in Florida, and at Bien Hoa Air Base in Vietnam starting in late 1965. This particular poster was photographed in Bien Hoa’s briefing room in the summer of 1967. The phrase “Only you can prevent a forest,” started as joke at the expense of the Forest Service’s beloved icon and slogan. It evoked the effort to destroy forests in stark contrast to the long-held Forest Service mission to save forests. Forty years later this image reveals a long history of interconnections between the Forest Service, technology, and warfare, and marks a turning point in national forestry policy and management.

Smokey’s presence was not limited to the ground. The pilots also dubbed their C-47 or other light aircrafts “Smokey Bears.” Smokey Bears were used in a supporting role for defoliation missions, dropping smoke grenades or flares to mark where to spray or to illuminate an enemy position.<sup>3</sup> A maneuver known as a “Smokey the Bear” happened when a flight mechanic would fail to throw a smoke grenade out the rear fuselage door to identify an enemy position to fighter pilots escorting the spray planes, leaving the grenade rolling around in the open compartment. “The



Slide VAS006661, Ranch Hand Association Vietnam Collection, The Vietnam Archive, Texas Tech University.

airflow pattern in the plane caused most of the smoke to exit through open cockpit windows,” nearly blinding the pilots and forcing them to pull off the target with colored smoke pouring out various openings and creating a moment “of sheer, stark terror” for the crew.<sup>4</sup>

Although Smokey had been unwittingly “drafted” to serve in Vietnam by Air Force personnel, it was not the first time the Forest Service had gone to war. During the two world wars, battalions of forest engineers had gone overseas to conduct logging and milling operations to supply American troops with much-needed

lumber. The agency's overt participation in the Cold War overseas until 1962 centered on loaning foresters to the U.S. Agency for International Development (USAID) to provide technical assistance to Third World countries.<sup>5</sup>

The Vietnam War, however, saw a wider array of Forest Service participation in military activities than ever before. In Vietnam, Forest Service responsibilities expanded to include, as Ronald Hartzler and David Clary wrote in their 1981 history, "support of both civilian and military interests in forest management, fire control and employment, and defoliation." The full extent of Forest Service involvement has not been fully explored by historians.<sup>6</sup> Some Forest Service personnel in Vietnam worked with or for the Central Intelligence Agency; others worked with the military on defoliation projects; still others conducted logging operations for USAID.

The CIA-Forest Service connection is the least known of the Forest Service's involvement in Vietnam. The CIA began hiring Forest Service personnel for its paramilitary operations in the early years of the Cold War and used them in operations around the world for the next three decades. The quasi-military culture of the post-World War Two Forest Service made its employees attractive to CIA recruiters. Smokejumpers were especially sought after because they already had training in parachuting and air delivery techniques in rough terrain to fight fires, and they were fit and adventurous. Several quickly found work with the CIA as "cargo kickers," men who pushed supplies out of cargo planes, just as they had pushed supplies out of Forest Service planes to firefighters. Smokejumpers liked working for the CIA because they could jump fires in the United States during the summer and train foreign jumpers or fly overseas missions the rest of the year.<sup>7</sup>

The CIA also operated private airlines such as Air America to carry out its covert missions, and needed experienced pilots, cargo handlers, and maintenance crews to staff them. Again, the agency turned to Forest Service smokejumpers and pilots. Air America moved equipment and personnel around Southeast Asia when using U.S. military aircraft was undesirable. "Undesirable" sometimes meant flying where the U.S. military was not supposed to be, like in Thailand or Laos. More often than not, it meant dangerous flights. Pilots maneuvered slow-moving aircraft at low altitudes to "bird dog" enemy positions for jet fighters, conducted aerial spraying, or dropped cargo to troops in the field while taking enemy fire. Forest Service pilots were accustomed to low-level flying and easily adapted to combat flying. Air America pilots also ferried Forest Service personnel working for USAID.

The Forest Service was not initially involved in the military's Operation Ranch Hand. Ranch Hand's first several spraying missions in January 1962 proved relatively ineffective. In response, the Military Assistance Command-Vietnam (MACV) ordered additional spraying missions that used stronger formulas. The military command, with consent from the South Vietnamese government but dissent from the U.S. State Department, then expanded its list of targets to include food crops, both to starve the enemy and to drive the South Vietnamese off the land and into internment camps. By 1969, more than half the arable land in South Vietnam had been sprayed.<sup>8</sup> The war against nature was viewed as essential to winning the war against the communists.<sup>9</sup>

MACV also ordered the Sherwood Forest and Pink Rose operations, which involved chemically defoliating the jungle to create dry fuel and then dropping

incendiary weapons to start a firestorm. Forest Service researchers from the agency's Montana and California fire research laboratories worked on those projects. Creating fire—not preventing it—was now the researchers' mission. Sherwood Forest began in January 1965 with the intensive bombing of Boi Loi Woods, a dense forest twenty-six miles northwest of Saigon that served as an enemy stronghold. Airplanes spent two days dropping eight hundred tons of bombs before the spray planes began dispensing 78,800 gallons of herbicide over the next twenty-nine days. Forty days later, after the foliage had fallen and the vegetation had dried, bombers dropped diesel fuel and incendiaries. The rising heat from the fires, however, triggered a rainstorm over the burning forest that doused the flames. The defoliant operation opened up the canopy as hoped, but only temporarily. The quick return of enemy forces to the area indicated that chemical agents alone would not deny the enemy use of the Boi Loi Woods for military operations.<sup>10</sup>

The military had high hopes for Operation Pink Rose, launched the following year, and even sent up a planeload of journalists to watch the burn experiment. Forest Service personnel were stationed in forward positions to monitor the rate of defoliation and sent word back to Ranch Hand when it was time to try burning the forest.<sup>11</sup> Results, however, were similar to Sherwood Forest—the heat created rain clouds that extinguished the fires. The military discontinued the firestorm experiments, which one government official later admitted was a “nutty” idea to begin with.<sup>12</sup> Defoliation operations designed to expose enemy communication and travel routes and to destroy crops continued in South Vietnam and then expanded into Laos in December 1965 and into North Vietnam in summer 1966. Though repeated Ranch Hand missions eventually killed the overstory, resistant bamboo quickly sprang up and provided thick cover.<sup>13</sup> In all, from 1962 to 1971, Ranch Hand pilots sprayed around 19 million gallons of herbicide and treated nearly 6 million acres.<sup>14</sup>

In January 1967, as fighting in Vietnam escalated, the Forest Service loaned a seven-man team of foresters to USAID to conduct forestry operations in South Vietnam.<sup>15</sup> Most of the lumber used by the military was being shipped from the United States, which created logistical problems. After visiting Vietnam, Forest Service Chief Ed Cliff agreed to supply personnel to increase local production of lumber and plywood.<sup>16</sup> Cliff personally selected Jay H. Cravens to lead the Forest Service team, which would advise the Montagnard natives on logging, milling, and reforestation efforts. In doing so, planners expected that making the Montagnards economically self-sufficient would undercut their support of the Viet Cong. Cravens and the other foresters lived in Green Beret compounds while visiting sawmill operations, and manned guard posts as civilians.<sup>17</sup> No one publicly questioned the logic of civilians trying to conduct logging operations in a war zone.

In the end, the ill-conceived USAID logging program was a political and economic failure. The Viet Cong demanded bribes from loggers and infiltrated operations. The best sawmill operator Cravens trained turned out to be the leader of the local Viet Cong unit.<sup>18</sup> Although the United States military provided logistical support and military protection for the foresters as they flew around South Vietnam to advise on logging operations and set up sawmills, the military also continued its defoliation and bombing missions, often near the proposed logging operations. Cravens visited

all forty-four provinces of South Vietnam while there, and recalled that everywhere he went, the country reeked of herbicide.<sup>19</sup> Damage to vegetable, fruit, and rubber tree farms angered farmers, and shrapnel in tree trunks wreaked havoc with saw blades at the lumber mills.<sup>20</sup> Instead of aiding the Vietnamese, the U.S. alienated them. Cravens experienced further frustration when top military commanders ignored his advice to stop using defoliants because of their ineffectiveness and long-term effects on the forests.<sup>21</sup>

Meanwhile, back in the United States, the general public, awakened to the potential impact of herbicides and pesticides on the environment by Rachel Carson's book, *Silent Spring*, questioned the widespread use of chemicals both in Vietnam and in their own national forests. By the 1970s, protesters had turned from demonstrating against herbicidal warfare in Southeast Asia to opposing the Forest Service's frequent use of DDT and other chemicals on national forests to kill what the agency considered undesirable trees, plants, and insects.<sup>22</sup> Protesters even threatened Forest Service employees with violence if they continued spraying.<sup>23</sup> The wording on the Ranch Hand poster, "Only you can prevent a forest," became an epithet leveled against the agency, as environmentalists became increasingly outspoken against the Forest Service's focus on "getting the cut out," and demanded the reduction or elimination of mechanized activities and logging in national forests and an expansion of wilderness areas. The Forest Service found itself involved in its own "cold war"—an environmental one waged in courtrooms by platoons of lawyers. Environmentalists used the National Environmental Policy Act (1969) and other new legislation to force the agency to file Environmental Impact Statements before spraying, and thus to slow or halt activity. Ultimately, the protests and lawsuits led to the suspension of the use of numerous herbicides and pesticides in the 1970s and to a rethinking of Forest Service policies, and of public forest management in general.

**James G. Lewis** is the staff historian at the Forest History Society in Durham, North Carolina. This article is adapted from his book, *The Forest Service and the Greatest Good: A Centennial History* (Forest History Society, 2005).

## NOTES

1. William Clifford Lawter, Jr., *Smokey Bear 2025: A Biography* (Alexandria, Va.: Lindsay Smith Publishers, 1994), 50.
2. John R. Spey, interview with author June 10, 2006. Spey, who was with the spray unit in Vietnam from 1961-1964 and taught replacement pilots stateside for several years after that, believed that a pilot had a friend in the Forest Service send over some posters, which then were altered. Paul Cecil, historian of Operation Ranch Hand, recalled hearing at a Ranch Hand reunion where the posters came from but was not absolutely certain. According to unit commander Ralph Dresser, the Smokey poster hung in the briefing room in Vietnam beside one that read, "Fuck Communism!" Ralph Dresser, interview with author, June 13, 2006.
3. "List of Slang and Key Terms that are indispensable in understanding the Vietnam War," author and date unknown, The Virtual Vietnam Archive, Texas Tech University, accessed January 27, 2006, at: <http://star.vietnam.ttu.edu/starweb/vva/servlet.starweb>.
4. Paul Frederick Cecil, *Herbicidal Warfare: The Ranch Hand Project in Vietnam* (New York:

- Praeger Publishers, 1986), 103.
5. Terry West, "USDA Forest Service Involvement in Post World War II International Forestry" in *Changing Tropical Forests: Historical Perspectives on Today's Challenges in Central & South America*, ed. Harold K. Steen and Richard P. Tucker (Durham, N.C.: Forest History Society, 1992), 277-99.
  6. Ronald B. Hartzler and David A. Clary, *Half a Century in Forest Conservation: A Biography and Oral History of Edward P. Cliff* (Washington, D.C.: USDA Forest Service, 1981), 29. Chief Ed Cliff refused to speak about military or intelligence aspects of the Forest Service in Vietnam on record when he was interviewed about his career in 1980 because he believed the missions were still classified. With the declassification of secret files and the willingness of those involved to share their experiences in the last decade, some of the Forest Service's overseas activities during the Cold War are finally coming to light.
  7. Kenneth Conboy and James Morrison, *The CIA's Secret War in Tibet* (Lawrence: University of Kansas Press, 2002), 75; and Don Courtney, "... And If You Find Out, I'll Have To Kill You," *Smokejumper Magazine* (January 2000), accessed June 2, 2006, at: [http://www.smokejumpers.com/smokejumper\\_magazine/item.php?articles\\_id=248&magazine\\_editions\\_id=16](http://www.smokejumpers.com/smokejumper_magazine/item.php?articles_id=248&magazine_editions_id=16). *Smokejumper Magazine* has a number of articles by Vietnam-era veterans recounting their time overseas.
  8. Cecil, *Herbicidal Warfare*, 29-35; and Edmund Russell, *War and Nature: Fighting Humans and Insects with Chemicals from World War I to "Silent Spring"* (Cambridge, UK: Cambridge University Press, 2001), 225-26.
  9. William A. Buckingham, Jr., *Operation Ranch Hand: The Air Force and Herbicides in Southeast Asia, 1961-1971* (Washington, D.C.: Office of Air Force History, U.S. Air Force), 69-72.
  10. Cecil, *Herbicidal Warfare*, 57-58; and Buckingham, *Operation Ranch Hand*, 109-12.
  11. Ralph Dresser, interview with author, 13 June 2006.
  12. "U.S. Admits Move to Burn Forests," *New York Times*, July 22, 1972. For more on the two operations, see Buckingham, *Operation Ranch Hand*, 109-12, 127-28. Both attempts were carried out during the rainy season, which the Forest Service had advised against.
  13. Jay H. Cravens, *A Well Worn Path* (Huntington, W. Va.: University Editions, 1994), 324; Buckingham, *Operation Ranch Hand*, 127; Robert Reinhold, "A Modest Proposal—'Sherwood Forest,'" *New York Times*, July 23, 1972; and Cecil, *Herbicidal Warfare*, 115.
  14. Buckingham, *Operation Ranch Hand*, 200.
  15. For more on the Forest Service and international forestry, see West, "USDA Forest Service Involvement in Post World War II International Forestry," 277-91; and Gerald W. Williams, *The USDA Forest Service: The First Century* (Washington, D.C.: USDA Forest Service, 2000), 138-41.
  16. Hartzler, *Half a Century in Forest Conservation*, 263.
  17. Jay H. Cravens, interview with author, 23 June 2005.
  18. *Ibid.*
  19. *Ibid.*
  20. Barry R. Flamm and Jay H. Cravens, "Effects of War Damage on the Forest Resources of South Viet Nam," *Journal of Forestry* 69 (November 1971): 789.
  21. Cravens, *Well Worn Path*, 338.
  22. Philip Fradkin, "More Curbs on Use of Herbicides Sought," *Los Angeles Times*, May 10, 1970.
  23. "Threats Delay Spraying of Timberlands," *Los Angeles Times*, September 30, 1979; Mark A. Stein, "Herbicide Spraying Plan Draws Fire," *Los Angeles Times*, August 15, 1983.