

Geographies of Chemical Warfare in Vietnam: The Merry Band of Retirees

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Abstract

This review explores the recent development of research on rainbow herbicides as chemical weapons and the geographies of chemical warfare in what is now the Socialist Republic of Vietnam. While the use and impacts of Agent Orange have previously been well documented, the production and extensive application of five other rainbow agents by the United States military has only recently been investigated in detail. What is exceptional about this research of chemical warfare landscapes is that the 23 refereed journal publications in this review were designed, implemented, and published in a unique collective research project by Ken Olson and a Merry Band of Military Retirees. Their groundbreaking research portfolio includes many geographical dimensions and the political ecology of chemical warfare. This includes the extensive exposure of civilians in Vietnam to these chemical agents, exposure of US military personnel in Southeast Asia and Panama, exposure of civilians near the private industrial sites that produced these rainbow agents in North America and the hazardous soil contamination that perseveres at these sites in Vietnam and the US. Given this impressive research depth and global scope, this review explores the unique way this research portfolio was developed by a Merry Band of Retirees through an interview with its leader, Ken Olson. It examines the goals and ethical orientation of these military veterans, the political ecology involved, the creative strategies they utilized to produce this innovative research, and how they changed the way Veterans exposed to chemical warfare agents are treated by the US government.

Keywords

Chemical Warfare, Rainbow Agents, Geography, Merry Band of Retirees, Political Ecology

1. Introduction

This research update focuses on two realms that relate to soil science research.

First, it highlights the groundbreaking character of the 23 Merry Band of Retirees refereed journal publications [1]-[23] regarding rainbow herbicides as chemical weapons during the US Vietnam War. Second, it explores the unique way in which this body of research was developed by an unofficial Merry Band of Retirees (MBR) committee. While it is beyond the scope of this short report to analyze and synthesize all these papers into a comprehensive monograph, this review provides a precis of the Merry Band of Retiree's portfolio and a synopsis of their unique collective approach and achievements as described through an interview with Ken Olson, the leader of the MBR.

It is important to note that this collective portfolio of chemical warfare research is not just one or two articles but a group of 23 publications with more than 700 total journal pages. Overall, they identify a political ecology of chemical warfare in an objective manner by re-evaluating its complex impacts in soil science, revealing the discursive struggle with the secret use of rainbow agents, and highlighting their continuing deadly human impacts through mixed methods analysis of maps, photos, interviews, and related military documents. In terms of geographical coverage, twelve of the articles investigate sites in Vietnam, four consider sites in the US, three study sites in Panama, two sites in Laos, one site each in Canada, Thailand, and Cambodia. It is especially significant to note that this overall initiative was not funded by any branch of the US military, any government agency, any non-profit organization, any university, or any news organization. It was in fact, designed, implemented and self-funded by the Merry Band of Retirees. The central focus of this research is on the historical way rainbow herbicides were first privately developed, with minimal attention to health and safety issues, and then secretly applied as chemical weapons over large areas in Vietnam and Southeast Asia. The explication of this political ecology also makes important connections to the global supply chain of this military-industrial complex by identifying the role of rainbow chemical agents on the plants, soils, military and civilians in North Vietnam as well as the health impacts on US military service personnel throughout this warzone. It also expands this chemical warfare research to the secret US military operations and sites in Laos, Cambodia, and Thailand. A final special contribution of this research is its detailed analysis of the toxic contamination by private businesses in the US and Canada at their industrial production sites and the continuing toxic health risks and environmental contamination in these local communities on the other side of the world.

Given the impressive global scope and academic depth of these publications, the primary objective of this article is to explore the unique way in which this research was designed, implemented, funded, and published as a Merry Band of Retiree's project. It was done through an interview with Ken Olson, who organized this military retiree group and the research project. A summary of the Merry Band of Retirees achievements is provided below.

2. Results Interview Achievements

I will list the most important Merry Band of Retirees achievements as noted in my

interview of Ken Olson:

1) After 55 years, the Merry Band of Retirees team finally made Agent Blue, cacodylic acid and arsenic household words in Vietnam Era veteran families and in the literature.

2) They were able to get Walter Reed hospital doctors and the VA to read their Agent Blue [1]-[7] publications since they were published in an open access journal that did not have the DoD and CIA filters applied. The doctors and researchers at Walter Reed hospital then published their paper on Agent Blue using their own Vietnam War veteran's case study. They also issued a directive to all the VA centers in the US to test all future Vietnam Era veterans who submitted claims for benefits from exposure to either or both arsenic and dioxin.

3) Ken Olson was asked by some of his contacts at the Can Tho University located in the Mekong Delta to apply for a Fulbright Specialist grant to travel to Vietnam to give lectures on Agent Orange [8]-[15] and Agent Blue [1]-[7] as well as conduct research related to arsenic, both anthropic and natural, in the Mekong Delta soils and groundwater [5]. Ken's entire 5-week trip expenses were paid by the Fulbright Specialist program, and he spent much of September and October of 2022 in Can Tho or Ho Chi Minh City. The Fulbright program was named after Senator Fulbright (Arkansas) who had held hearings in the late 1960s and early 1970s to stop the spraying during the Vietnam War for environmental and human health reasons. Olson's visit fit with the historic mission of the Fulbright Specialist program. The US State Department approved his visit to Vietnam.

4) Two Vietnam War team papers [16] [17] will be presented in April of 2025 at the 50th Anniversary of the end of the Vietnam War Conferences at the Vietnam Archive in Lubbock, Texas (Texas Tech). All the team papers (including soil tunnels) [18]-[20] have been signed by co-authors and placed in the Olson drawer at the Vietnam War Archive after scanning. These papers are now available in the archive and electronically for future Vietnam War geographers, historians, and scholars.

5) After the team completed their team research work in Vietnam, they expanded it to include Laos, Thailand, and Cambodia which were affected by the 2nd Indochina War. That war was a secret. Only 20 years after the end of the war did the US public become aware of it. By that time, the public interest level had dropped in the US and other countries paid little attention to the war on the Ho Chi Minh trail. The findings were published in four papers [16] [21]-[23] that are included in the attached list of Merry Band of Retirees articles.

6) The Merry Band of Retirees has worked with the Panama veteran groups to address the impact of herbicides and pesticides on the Panama Canal Zone. They published three papers [6] [10] [15] addressing the use of commercial herbicides containing dioxin TCDD or arsenic, with dioxin TCDD and/or arsenic, on eight military grounds and perimeter fences.

3. Discussion Emerging Themes

Reflecting on this interview, several themes emerge from the collective action of

this MBR research initiative. First, since this chemical warfare research involved documents that were originally classified as secret information by the United States government it was necessary to have expertise in classified information, dealing with government agencies in many countries and juggling complex institutional protocols. In addition, the MBR also did fact checking of complex scientific details and consulted regarding questions of ethics, law, and research protocols. Overall, this MBR oversight was like what Institutional Review Boards perform at universities and colleges but also involved ongoing research support in addition to their initial project reviews.

Since this research involved substantial and sometimes challenging fieldwork, the MBR offered broader connections to disciplinary scientists, regional experts, and military experts in various fields. It also provided creative solutions for fieldwork collaboration, nondisclosure issues, disinformation, dealing with counterintelligence operations, logistical challenges, and local dissemination of information.

Since the MBR convinced the doctors at Walter Reed Hospital to direct VA Centers in the US to test all future Vietnam Era veterans submitting chemical weapons claims to either or both arsenic and dioxin it provided a direct improvement in the way in which Vietnam Era veterans were treated regarding this chemical warfare. By dealing with incomplete information and outdated scientific models to improve the Veteran's Affairs service for Vietnam Era Vets the MBR demonstrated their courage and commitment to honor the sacrifices of their fellow soldiers. Since this occurred long after their formal military service ended, it should be noted that it was above and beyond the call of duty.

The extensive use of Agent Blue to destroy the rice harvest in South Vietnam and cause hunger in the civilian population raises new questions regarding the Geneva Conventions. While this issue has previously been investigated and debated by various sources, this recent research casts new light in this regard. First, the updated insights of MBR research about the prolonged impacts of these chemical agents in the soil and on human health provide a substantially improved scientific framework for analysis. In addition, the release of previously classified documents regarding the hidden decision making of US government officials in that era establishes what these officials knew about these chemical weapons, what they really intended to accomplish with their use and how they planned to secretly cover up their tactical interventions. The MBR response to these new research challenges was to treat everyone who was exposed to these chemical weapons with respect and concern, no matter what their country of origin was. Perhaps one day a documentary or Netflix series will further explore the global quest of the Merry Band of Retirees to show the objective reality as well as acts of humanity along the way.

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Bryan Higgins was drafted into the US Army and served as a Science and Engineering Aid in the Neurophysiology Section of the Army Chemical Corp at Edgewood Arsenal, MD. He thanks his friends, colleagues and students from Vietnam for their camaraderie over the years.

Ken Olson enlisted in the US Army and served as a Clerk Typist (SP5) at Fort Knox, Kentucky and as a Supply Sergeant in the US Army Reserves at Cleveland, Ohio during the Vietnam Era.

These 23 research studies were conducted with the support and approval of the Merry Band of Retirees Research Committee. The team included five US Vietnam veterans, two US Vietnam Era veterans, two US Army veterans, and four Agricultural College Professors. The team mission was to conduct soil, water, agricultural and natural resource management scientific research; the synthesis and analysis of current and historical documents and scientific evidence relevant to the legacies of war, especially the US Vietnam War; and the preparation and publication of peer-reviewed papers of interest and value to those who lead and served in the US military, especially Vietnam Era veterans, their families, and the general public.

Conflicts of Interest

The author declares no conflict of interest regarding the publication of this paper.

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