

Landscapes of Change: Badger Army Ammunition and Sauk Prairie

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Introduction

A north-facing view from atop the Prairie du Sac dam affords a fleeting glimpse of something wholly different from the picturesque Lower Wisconsin Riverway (LWR) and its pastoral surroundings. For nearly 40 years the Badger Army Ammunition Plant (BAAP) has sat vacant and idle on Sauk Prairie, tempting any onlooker to explore the mysteries that lie beyond its chained gates. The more than 1,000 buildings occupying this 10,000-acre swath of land on the glacial outwash plane that is Sauk Prairie are visual reminders- monuments- to the unprecedented landscape transitions that took place here. Like any relic of this scale, questions arise as to its genesis, evolution, and purpose. However, within the confines of this class we have chosen to narrow our scope to just two landscapes of change, specifically, the ways in which BAAP changed the physical and socio-economic landscapes of Sauk Prairie and surrounding counties.

After analyzing PLSS notes, historic images and accounts, aerial photos, labor statistics, census data, and Plant publications we claim that BAAP contributed to Wisconsin in less than visible ways. BAAP is a blight on the landscape and much of it is contaminated with toxic chemicals, however, if BAAP never occupied Sauk Prairie the region would not have been awoken from the great depression when it was, nor would the region have been so connected with cheap and reliable transportation. Further, though contaminated, the land that BAAP occupies is a wild area with bird species seen few other areas in Wisconsin and vegetation the

Prairie has not seen in thousands of years and. We do not aim to defend the War Department in their decision to build BAAP on Sauk Prairie, however, consideration of the various benefits that BAAP brought to surrounding communities lead to a more nuanced view of its history.

Back

ground

The story of BAAP and how it shaped Sauk Prairie involves events on spatial and temporal scales so disparate it is a wonder how they could be related. The glaciers that advanced and retreated across Wisconsin took tens of thousands of years to shape the outwash plane that is Sauk Prairie; the settlers who uprooted the tall grass and broke the sod took decades to transform the prairie to an agricultural mecca; the political processes which determined that the fate of Sauk Prairie was to host a powder plant took years; and in a fraction of a second in September, 1966, Hardening Still #4 exploded on the Ball Powder Line destroying two buildings (Goc 2002: 312). Such events are seemingly incommensurate; however, they can all be related in a narrative. This is the power of narrative. There is no better place, then, to start with an engagement of narrative and its bearing on history, nature, and science. From there we will delve into the literature surrounding BAAP relevant to our study of how BAAP shaped the land and surrounding socio-economic structures. We have grouped the literature into two broad categories: historical works and those concerning pollution, restoration and reclamation.

Allen et al. (2005) laments the impending loss of narrative in ecology while juxtaposing it against mechanism. Most of their discussion (fascinating as it is) is beyond the scope of our study; however, their description of narrative as something that “can relate in a coherent way contrasting types of things from different scales” is informative (Allen 2005: 334).

Narrative, though, is not merely a tool used to relate disparate events, nor can any narrative be neutral, a claim provocatively argued by Cronon (1992). Indeed, “by writing stories about environmental change, we divide the causal relationships of an ecosystem with a rhetorical razor that defines included and excluded, relevant and irrelevant, empowered and disempowered” (Cronon 1992: 1349). Such decisions are necessary, for telling a ‘complete’ history is impossible. By the very nature of making these decisions biases invariably creep into our stories, thus, historians and scientists must be explicit about their point of view (Cronon 1992). The inevitability of such biases is important to keep in mind as we assess both the historical works and the more scientific literature on pollution and reclamation.

In Michael J. Goc’s 2002 account, “Powder, People and Place”, he provides a thorough history of the Sauk Prairie spanning from de-glaciation, through BAAP’s siting, construction and operation, finally resting with the plant’s closure and wake. Goc contributes a wealth of knowledge and demonstrates thorough research, however, it is clear in his nostalgic recounting of Sauk Prairie and its farmers that Goc holds a sentimental connection to the ‘millennial prairie’ and its original (euro-American) settlers (Goc 2002: 15).

In his introduction he briefly highlights the area’s defining geologic history and Native American ‘handiwork’ while focusing mostly on Sauk Prairie’s farming community, which occupied the Prairie from approximately 1840 until the construction of BAAP in 1941. Although acknowledging the continually shifting nature of the Prairie, it is the “idyllic farm community, abruptly snuffed out in its prime” that Goc considers the “success story that came to a dramatic and tragic ending” (Goc 2002: 9). Within this statement lies the framework in which Goc operates; having framed the story as a tragic decline of a farming community (“like the athlete dying young”) he is unable to do justice to the conflicting story of BAAP as benefit (Goc

2002: 9). Indeed, “the way a narrator constructs a scene is directly related to the story that narrator tells” and if Goc’s is to be a tragic story of decline the opening scene must be one worthy of preservation (Cronon 1992:1354). It is in this light that we view the introductory descriptions of the “idyllic family farm community” and the Prairie (‘a postscript to hope’): staging for a decline (Goc 2002: 9, 15).

In the “The Local Impact of a Defense Industry: Baraboo, WI and Badger Ordnance Works”, Thorpe (1968) effectively tells the anti-story of “Powder, People, and Place”. Thorpe documents the pleasure with which the Baraboo chamber of commerce, city council, and business people welcomed the economic boost Baraboo they would experience from the neighboring BAAP (Thorpe 1968). Indeed, by 1942 (the year the plant opened) the amount of welfare needed in Sauk County steadily declined and the depression era began to end (Thorpe 1968: 30). The story is not one-sided however; she documents the displeasure of many displaced farmers which resonated with one woman’s sentiment, “we’d rather raise food for the national defense program to build strong bodies than to see a powder plant raised on our lands to destroy these bodies” (Thorpe 1968: 18).

Sharing this economic geography lens is Erickson (1977) who, using regional impact multipliers, estimated the extent to which income in areas surrounding BAAP was attributable to it. Erickson (1977) contributes valuable data and analysis of wages and salaries of the commuting work force of BAAP in 1974 only bolstering Thorpe’s view of BAAP as benefit.

Less prolific, however still significant are the historical documentaries, “Powder on the Prairie” and “Powder to the People” produced by Dave Erickson (1993, 2000 respectively). These works stress stories of farmers displaced by the BAAP as well as its workers (also see Shafer et al. 1996, Crown 1996, and Glaser 2002).

While largely beyond the scope of our research, we cannot ignore the most active segment of the literature on BAAP concerning toxics and pollution. Golden-Krasner's (2005) "Toxic Prairie" is a good survey of the pollution wrought by BAAP as well as a detailed analysis of the social and political processes by which the pollution occurred. In it she acknowledges that BAAP is not the most dangerously polluted site in the country, however, "[BAAP] is instructive precisely because it is typical of 'more than 30,000 individual sites on 11,000 installations and former military properties' scattered mainly in rural areas across the country saddled with toxic pollution" (Golden-Krasner 2005: 5).

In addition to describing the hazards of living and working in and near BAAP she explains how "the contractors, the communities, and the army allow[ed] so many sites, including those at the GOCO munitions facilities like Badger, to become so polluted, even in the wake of major federal and state level environmental legislation in the 1970s" (Golden-Krasner; 6). To this end, she points to the operators of BAAP controlling the dissemination of information about toxic chemicals, placing the burden of individual safety on the employees and neighbors, and vigorously lobbying against environmental regulations and to discredit environmentalism (Golden-Krasner 2005) (More detailed research on toxics and decontamination can be found in CSWAB 2002, Zhang et al. 2001).

"In the beginning was the story. Or rather: many stories, of many places, in many voices, pointing towards many ends" (Cronon 1992: 1347). Indeed, many stories about BAAP have been told: its origin (Goc 2002, Thorpe 1968, Shaffer 1996), its setting (Goc 2002), its workers (Erickson 1977), its critics (Glaser 2002), and its wake (CSWAB, Zhang 2001). But with the exception of Lange (1990) no systematic analysis of land cover change on Sauk Prairie has been undertaken. In "A Post-Glacial Vegetational History of Sauk County, and Caledonia Township,

Columbia County, South Central Wisconsin”, Lange describes pre, early and post-settlement vegetation however does not concern himself with land cover change since the construction of BAAP. We intend to fill this gap.

Methods

We assessed land cover change on Sauk Prairie via three avenues, namely, interpretation of historic surveyors’ notes and plat maps, analysis of historic images and accounts of the Prairie, and a systematic comparison of aerial photos spanning 1937-2008.

Dating to the 1840s, surveyors’ notes from the original Wisconsin Public Land Survey were an invaluable resource in re-creating the prairie during the mid 19th century. We identified PLSS sections containing BAAP using USGS topographic maps and accessed PLSS survey records pertaining to the identified sections at the University of Wisconsin-Madison general library system digital collections¹. We read relevant survey descriptions noting topography, hydrology and vegetation, paying particular attention to tree species and spacing. We converted distances, given in chains, to feet using a ratio of 66 feet to 1 chain.

Whereas the surveyors’ notes were our earliest description of the Prairie, an 1851 watercolor by Johann Baptiste Wengler, and the 1892 photo shows the Prairie without having to interpret the antiquated and often illegible surveyors’ descriptions (fig.1, fig. 2 respectively). Further, early settler accounts offer direct descriptions of the prairie nearing the turn of the century. The 1892 photo looks south onto Sauk Prairie from the height of Pine Hollow (see fig. 1, appendix) while the 1851 watercolor depicts the Prairie from ground level. We obtained the images through the collections of the State Historical Society of Wisconsin.

¹<http://digicoll.library.wisc.edu/surveynotes/>

Completing our record of land cover change on Sauk Prairie are seven aerial photos spanning from 1937 to 2008. The photo series, in contrast to the historical images, accounts, and survey notes, allowed us to systematically quantify land cover change over time. We acquired individual photos for each year at the Robinson Map Library where depending on the year, the number of images contained by our study area varied between one and seven. After scanning images, we used Adobe Illustrator to stitch together individual photos to make single image composites for each year. After printing composites we quantified land cover percentages for each year using a grid printed on transparent paper. We determined percentages by laying the grid (cells were 1cm²) over the image and classifying by (majority cover) each cell into one of the five categories: farmland, prairie, savanna, closed-canopy, and built environment. The categories were defined according to the follow criteria:

Farmland: land devoid of trees, buildings, and roads that shows evidence of agricultural use during some point of the year.

Savanna: land where trees are present, however, spaced as to form less than 50% land coverage.

Closed-canopy: land containing tree cover of over 50%.

Built environment: land containing mostly man-made and maintained structures including, buildings and roads as well as groomed grass.

Prairie: land where un-groomed tall-grass species dominate and trees are absent.

Equally important as quantifying the changing land cover of Sauk Prairie in response to BAAP was identifying the socio-economic changes arising from the Plant's siting. We reviewed two print newspapers published by the Plant, *Badger Ordnance News: the Official Publication of the Badger Ordnance Works* and *Badger Ordnance World*.² From these sources we were able to obtain background information on the emergent socio-economic structures that grew out of the

² Both can be accessed at the Wisconsin State Historical Society's Microfilm collection.

opening and operation of BAAP. Further, bus schedules found in these publications illustrated the reach of BAAP's influence in the region. We also explored Census data and Bureau of Labor statistics to uncover general trends in population, occupations, and income of surrounding communities and counties in response to the construction and operation of BAAP.

Results

Land Cover

Pre-Settlement Land Cover

From PLSS surveyors' notes and early settlers' accounts, a portrait of Sauk Prairie, circa 1840, emerges as being dominated by mesic and dry prairie but ringed with oak savanna (oak openings) and bounded to the north by oak forests. Since our area of interest lies in the land that would become BAAP in 1941, we constrained our scope to T 11N R 6E sections 35 and 36, T 10N R 6E sections 1, 2, 3, 10, 11, 12, 13, 14, 23, 24, and T 10N R 7E sections 7,18. Along a transect east to west in the northern part of our study site, traversing the base of the Baraboo

Hills, a surveyor encountered

mostly burr oak openings among

rolling hills and occasional streams

(fig. 8, appendix). To the south in

sections 1, 2, 3, 10, 11, 12, 13, 14,

23, and 24 of T 10N R 6E,

surveyors encountered mostly prairie with patchy oak openings (including burr and white oaks)

and classified the land as 'first rate' with regards to agricultural potential (Burt 1840).

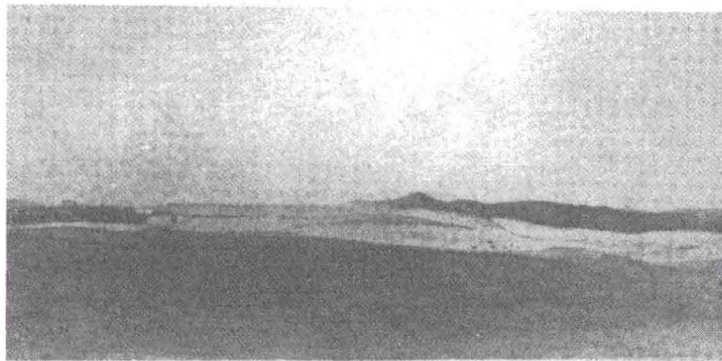


Fig. 1. This 1851 watercolor of Sauk Prairie, by Johanne Wengler, likely depicts the land as the PLSS surveyor Burt did in 1840.

Increasingly to the south of the study site were oak openings and patches of closed canopy or ‘timbre’ (Burt 1840).

Early settler accounts of the Prairie attest the natural beauty of the prairie wildflowers and oak openings. In 1861 Edmund Rendtorff described Sauk Prairie as “full of flowers, changing almost every week, one closing to make room for another- more blossoms than leaves or spears of grass” (Lange 1990). The Prairie drew poets and painters to depict its magic and while Consul Butterfield lamented that every place could not be “so happily conditioned” as Sauk Prairie, Johann Wengler painted this 1851 watercolor of the Prairie as the surveyors would have seen it: rolling hills, and patchy openings (fig. 1)(Lange 1990).

Post-Settlement Land Cover

An 1892 photograph looking south onto the Prairie from Pine Hollow depicts a significantly modified landscape (fig. 2). Settlers had removed stumps and stones from the



Fig. 2. A view from Pine Hollow looking south onto Sauk Prairie, 1892.

ground, plowed under pre-settlement vegetation, and defined field boundaries with trees. This pattern continued with an increasing influx of settlers throughout the latter part of the 19th century, and into the early 20th century.

From a series of aerial photos spanning 1937 to 2008, we discerned that by 1937 82.3% of the land that would later house BAAP had been converted to farmland (fig. 3). Patchy oak savannas still existed, but were left to more hilly terrain on the eastern side and northern extreme of the study area. What closed-canopy vegetation remained was relegated only to the boundaries between

fields or the northern tip of the study site. Built environments, at this time mostly farmsteads and roads, occupied only 2.4% of the overall study area (fig. 3, for aerial images see appendix).

By 1949 the landscape had drastically changed on the Prairie; farmland, the dominant land cover of 1937, precipitously declined from 82.3% to 11.9% (Fig. 9), ceding its dominance to the built environment of BAAP (45% of the study site). Further, and much to our surprise, it is even apparent to the naked eye that the area of savanna is greater than that observed in the 1937 series.

By 1949 general plant construction was complete, thus its footprint stays relatively constant throughout our analysis. Between 1949 and 2008, areas that were not built experienced re-growth such that presently 21.9% of the study area is covered in a closed canopy environment, 17.8% is prairie, and 18.4% is savanna (fig. 3).

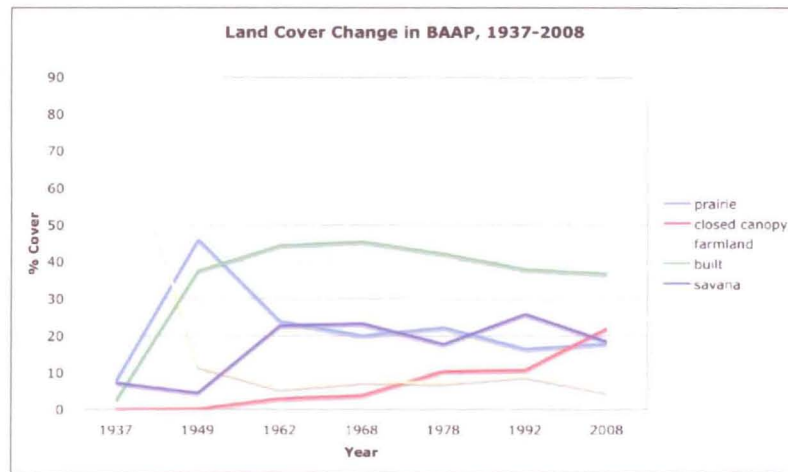


Fig. 3. With the construction of BAAP in 1941, we see a crash in percent farmland, while at the same time built environment spikes. Note, the spike in prairie vegetation and the steady re-growth of savanna and closed canopy vegetation.

Socio-economic Landscapes

Transportation

With the construction of BAAP there emerged a need to transport workers from surrounding communities to and from the Plant. The extent and mode of transportation was

variable throughout the period of operation, however, its extent was greatest during WWII. In 1943 buses operated by Mason and Hanger Corporation serviced at least 41 communities in 9 counties (fig. 10, appendix). The buses' primary objective was to shuttle workers to and from BAAP, however, anyone willing to pay was allowed to ride as well. At its peak, during WWII, the fleet served 7,000 riders daily and traveled 425,000 miles monthly.

Economic Geography

As Sauk County's largest employer, BAAP inserted an unprecedented amount of capital into local economies. By 1955 the Plant's annual payroll had topped \$14,500,000, dwarfing the

| Job Trends in Sauk County, 1940-1944 | | | |
|---|---------------|--------------|-------|
| | Manufacturing | Construction | Other |
| April, 1940 | 1015 | 448 | 9,276 |
| July, 1942 | 1900 | 12,100 | 8500 |
| July, 1943 | 5300 | 2,000 | 7000 |
| January, 1944 | 6300 | 200 | 7000 |

largest previous payroll of just \$550,000 (Thorpe 1968). While Sauk County's population had stayed constant for the previous 40 years, between 1940 and 1950 it spiked by over 4,400 (U.S. Census). The plant's

siting also shifted a primarily agricultural county to a manufacturing center. Before the war there were only 1,000 factory employees, while afterwards there were over 6,000 (fig. 4). BAAP brought the depression era to a close in Sauk County, quickly reducing the need for welfare assistance (Thorpe 1968). By 1974, near the end of the Vietnam Conflict, though the Plant's payroll had declined, it was still paying in wages and salaries: \$6,652,620 to Sauk County, \$850,011 to Richland County, \$899,287 to Juneau County, \$1,613,789 to Columbia County, and \$763,778 to Dane County (fig

Fig. 4. Job trends in Sauk County, 1940-1944 (U.S. Bureau of Labor Statistics).

11, appendix). In addition to wages and salaries, BAAP had significant needs in terms of automotive supplies, asphalt, cement blocks, canvas, paint, and propane; thus, it inserted into local economies significant amounts of capital to procure these goods (Erickson 1977). In 1974, BAAP's procurement purchasing was \$96,098 in Sauk County, \$7,926 in Columbia County, \$6,099 in Juneau County, and \$566,993 in Dane County (Erickson 1977).

Discussion

The view that BAAP was a “dramatic and tragic ending” to “an American success story” is understandable (Goc 2002: 9). The government forcibly removed (and sometimes inadequately compensated) over 100 families from their farmsteads, many of which were established by settlers generations earlier. Further, BAAP is unquestionably a blight on the pastoral landscape of the Lower Wisconsin Riverway (LWR) as well as an established threat to human health in the form of contaminated groundwater (CSWAB 2002). It is not our intention to defend the War Department in their decision to build BAAP on Sauk Prairie, however, consideration of the various benefits that BAAP brought to surrounding communities lead to a more nuanced view of its history. Specifically, our analysis of the changing land cover on Sauk Prairie, the economic boon that BAAP brought, as well as the transportation network that linked dozens of communities in the LWR all suggest that BAAP contributed to Wisconsin in subtle yet profound ways.

The transformation from prairie, to farmland, to industrial center is not an unfamiliar story in American history, but what is surprising is the significant re-growth of vegetation that accompanied this rapid industrialization. When the settlers arrived they found the land as it had been described in the original 1840 surveyors' notes, but immediately began the arduous task of

preparing the land for agriculture. The deep-rooted native prairie vegetation was not easily broken even with teams of a dozen oxen and thirty-inch plows able to turn two feet of sod at a



Fig. 5. Sauk Prairie sodbusters, late 1800s.

time (Lange 1990). A Swiss settler on the Prairie circa 1855 described the task as such: “every inch was a hard pull- often a struggle...[but] furrow by furrow, we triumphed over the wilderness... there is a deep thrill in all such effort- it causes a leaping of the heart incomprehensible to one who has not had the experience” (Ragatz 1935).

In this fashion, settlers ‘triumphed over the wilderness’ by logging, plowing and converting to fields the prairie and oak openings that the surveyors had observed in 1840. The few trees that remained on the Prairie by 1937 mostly occupied thin strips along field boundaries or hilly or rocky areas less desirable for agriculture (fig. 2). It is this primarily agricultural landscape that remained dominant through 1937; indeed, had BAAP not supplanted the farms, they would probably remain today.

BAAP did supplant the farms, though. And with the construction that began in 1941 the Prairie commenced, once again, a great transition- this time to a state that both resembled and at the same time so contrasted the pre-settlement landscape of the mid-1800s. This transition involved the construction of an ammunition plant the size of a small city, complete with housing, a hospital, a fire department, a coal-fired power plant, a sewage treatment facility, and over a

thousand other buildings. With this explosion of the built environment, from 2.4% of our study site to 37.5%, between 1937 and 1949, it shed 70.4% of its farmland (fig. 3). The only farmland that remained throughout BAAP's operation was leased land located in the Plant's southwestern corner (fig 2, appendix).

To prevent explosions from spreading, BAAP's thousand buildings were liberally spaced, leaving vast open areas that were neither built, farmed, nor maintained (Goc 2002:117). It is in these areas that we see, over the course of 50 years, the most significant re-growth of prairie, savanna, and closed canopy vegetation. Additionally, there were areas of the plant that we classified as built in 1937, but due to long periods of dormancy were overgrown by vegetation and thus were included in other categories in subsequent years. The general trend of re-growth was indicative of ecological succession. Seen here, the first to rebound was prairie vegetation spiking abruptly around 1949, only later to lose ground to the emerging savanna landscape (fig. 3). All the while closed-canopy crept up from a meager .1% in 1937 to over 1/5th of the plant's area in 2008. Indeed, the late August Rhinekind, a BAAP site surveyor during the initial construction, stated after returning to the plant in the 1970s, " I don't even recognize this place, there are so many trees".

The resurgence of prairie vegetation and trees between 1937 and 2008 cannot all be attributed to mere re-growth. Much in the vein of the Theodore Roosevelt School of conservation, BAAP seeded upwards of 125,000 trees between 1953 and 1967, many of which were pines (Goc 2002: 331). Further, by the 1970s BAAP saw its first formal prairie restoration as Dave Fordham, commanding officer, requested that a few acres of farm in the northwest corner be pulled from the leaseholder and re-planted to prairie (Goc 2002: 353).

BAAP contributed in this way, both allowing and providing the impetus for a resurgence of pre-settlement vegetation on the Prairie. With the resurgence of vegetation came wildlife habitat. Indeed, the restoration of pheasant habitat in particular provided plant personnel and the farmers who leased fields ample hunting opportunities. In addition to game species, this pseudo-wildlife sanctuary provided a refuge for over a hundred species of birds, 18 of which are considered 'critical' to Wisconsin (Goc 2002: 353). While this resurgence of vegetation and subsequent protection of wildlife is well documented, it is hidden behind the closed gates invisible to the to the passerby.

Even more difficult to see, however, is the benefit BAAP brought to the region in terms of transportation, for the bus network that once brought thousands of workers to and from BAAP no longer exists. The bus lines which extended as far as Richland Center to the west, Pardeeville to the east, Mauston to the north, and Madison to the south instantly connected this region of Wisconsin providing a thorough and cheap public transportation system where there is none today³ (fig. 10, appendix). The bus network was not only necessary to shuttle a largely immobile work force to and from the Plant but its import was amplified by the war-time rationing of gasoline and tires. Between February and July of 1945 daily ridership averaged roughly 7,000 and the fleet traveled a total of 425,000 miles monthly. Imagine a bus system where for 25 cents⁴ one could ride from Richland Center to Baraboo, or Mauston to Madison, such an image seems conspicuously reminiscent of the light rail system being proposed today.

A common protest heard from farmers whose property faced expropriation, was that Sauk Prairie had arguably the best soil in the state. In a telegraph sent from the citizens of the Sumpter-Merrimac area to Wisconsin senators, congressional representatives, and the National

³ Note: the LWR communities serviced by the bus system: Sextonville, Gotham, Lone Rock, Spring Green, Arena, Mazomanie, Black Earth, Cross Plains, Prairie du Sac, and Sauk City.

⁴ Approximately \$3 in 2009.

Farm Bureau, they claimed that Sauk Prairie had some of the best farmland to be found in the county, state or nation, and “vigorously protest[ed] the inclusion of this high-value land in the area to be designated for the plant” (Goc 2002: 87). Clifford Townsend, head of the USDA’s Office of Agricultural Defense Relations echoed the citizens saying, “it is criminal to destroy such a Garden of Eden” (Goc 2002: 87). We find this ironic, however, because by the time the government seized the land most of the farms on the Prairie, had converted from raising crops to dairy operations (Goc 2002: 55-58). Such were the vigorous protests from residents and agency representatives despite the fact that, in relation to the total farmland in Sauk County the land expropriated for BAAP was miniscule (.02%) (US Census Bureau).

With the transition from agricultural production to weapons manufacturing, this small portion of land brought in enormous amounts of capital compared to its former manifestation. Immense shifts in occupational sectors, wages and salaries and general population transformed regional economic activity on a scale not seen before. Largely due to BAAP, the city of Baraboo increased in population by over 13% between 1940 and 1950, while in 1974 the plant inserted \$2,767,742 dollars of total direct income⁵ (TDI) into the city’s economy. Likewise, Sauk City and Prairie du Sac saw similar gains; here, BAAP inserted a combined \$1,437, 282 of TDI in 1974. On an individual level, a top-paid male worker at the plant in 1944 could bring home over \$2,800 in 2009 dollars per month, while top-paid women received roughly \$400 dollars less (both were exceptional wages for the time).

These economic gains, however, did not come without negative repercussions, real or perceived. Many of these rural communities experienced a “straining of the social fabric,” as the influx of workers and money brought with them ‘big city problems,’ which were often

⁵ This represents the sum of wages, salaries, and procurement purchasing.

pushed to the fringes. As well, the cyclical operating periods made the boom-bust nature of the plant even more apparent. In a grand sense, the economic development brought by the plant proved an ephemeral source of income for the local communities, shutting down between wars and eventually closing for good with the end of Vietnam. Further, a community's proximity to the plant was not a guarantee of the benefits of the Plant's procurement purchasing. Contrary to what local officials liked to tout, much of the procurement happened at a distance in larger metropolitan areas. This spatial discrepancy in procurement purchasing was greatest during the Plant's construction, when much of the work was done by large contractors based in cities like Chicago, where the top contractor was awarded \$4.4 million dollars to erect 308 buildings (Goc 2002: 121). Indeed, in 1974, \$566,993 worth of procurement purchasing was done in Dane County opposed to the only \$96,098 spent in Sauk County (Erickson 1974).

Conclusion

The story we now conclude is woefully incomplete; however, to tell a story that would do justice to the immensity of the topic of BAAP is a difficult task. We are neither the first nor the last to attempt to glean some semblance of meaning from BAAP's history, but our approach, we think, has been novel. By asking how BAAP shaped the (ambiguous) 'landscape' of Sauk Prairie we focused our analysis to both the physical land cover on the Prairie and the socio-economic changes BAAP wrought on surrounding communities.

We documented the changing land cover on the Prairie by assessing original PLSS surveyors' notes, historic images, and modern aerial photos. Sauk Prairie circa 1840 was comprised of mostly mesic and dry prairie vegetation and rimmed with oak openings. In the late 19th century and early 20th century, settlers cleared trees, removed stumps and plowed under

prairie vegetation, such that, by 1937 Sauk Prairie was 82% farmland. With the construction of BAAP in 1941 land cover changed in both predictable and surprising ways. Unsurprisingly, built environment on the Prairie spiked, but shockingly prairie, savanna, and closed canopy vegetation did as well. This resurgence, we found, could not be attributed solely to re-growth; in fact much in the vein of old-school conservation BAAP seeded over 125,000 trees.

The socio-economic landscape surrounding BAAP changed as significantly as did the physical land cover on the Prairie. BAAP almost instantly jump-started the stagnant population and economy of Sauk County bringing in thousands of plant workers and inserting millions of dollars into local communities. In addition, it connected the region with a network of buses that not only served plant workers, but anyone who desired a ride and could pay the reasonable 25 cents.

Now in the process of changing hands, BAAP, which once so altered Sauk Prairie, faces its own demise. Hopefully, those in decision-making positions will preserve pieces of the Plant as a reminder to its rich history and intimate relationship with the people and landscape of Prairie. The displacement of the farming community in order to build BAAP was undoubtedly regrettable; however, if BAAP never belched away on Sauk Prairie we would not have the opportunity to divvy up thousands of acres between Devil's Lake State Park, the Ho-Chunk, and the USDA Dairy Forage Research Center. Nor would the region have been awoken from the great depression earlier than other rural communities like it or have been so connected with a cheap reliable transportation network.

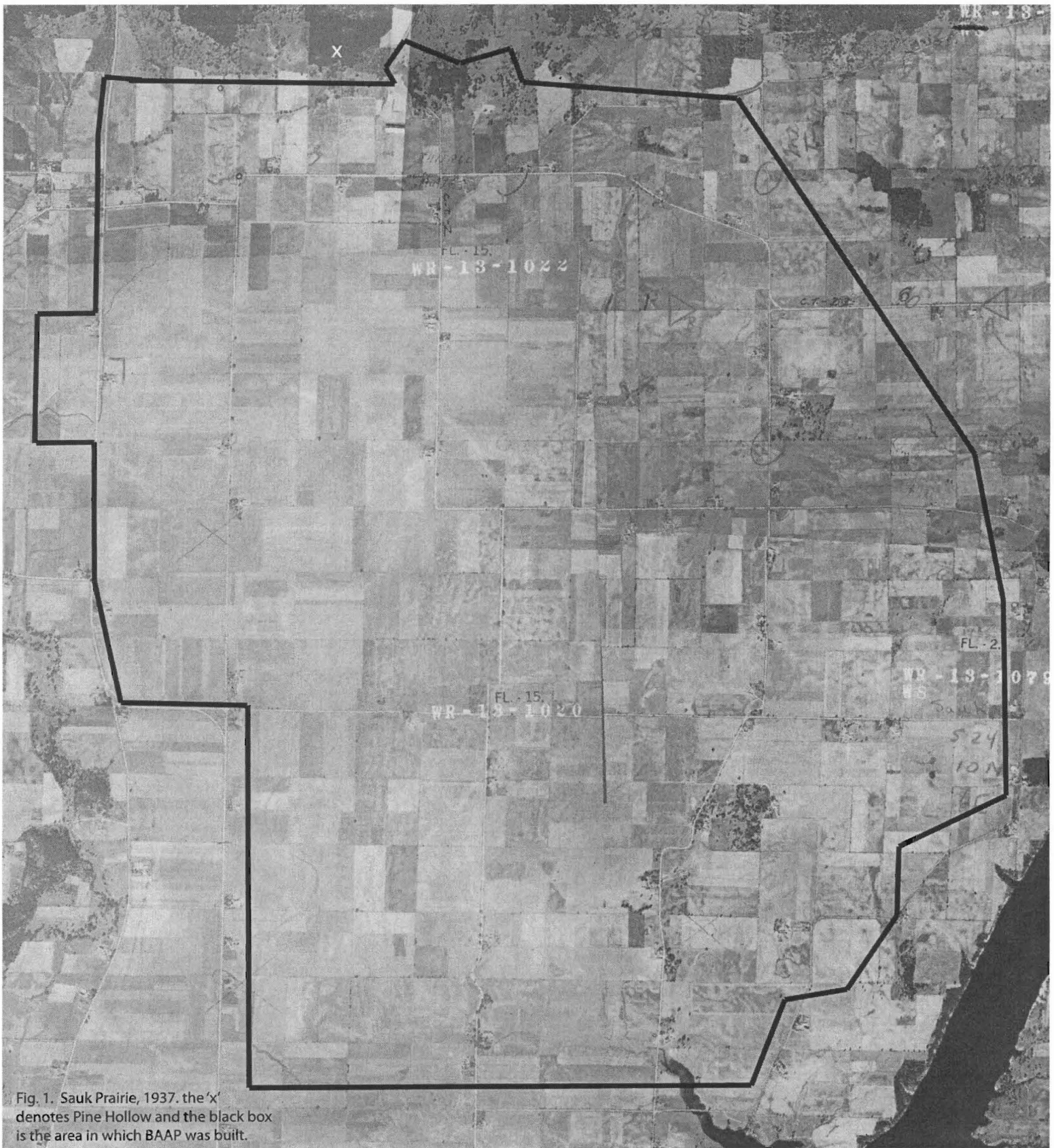


Fig. 1. Sauk Prairie, 1937. the 'x' denotes Pine Hollow and the black box is the area in which BAAP was built.



Fig. 2: BAAP, 1949



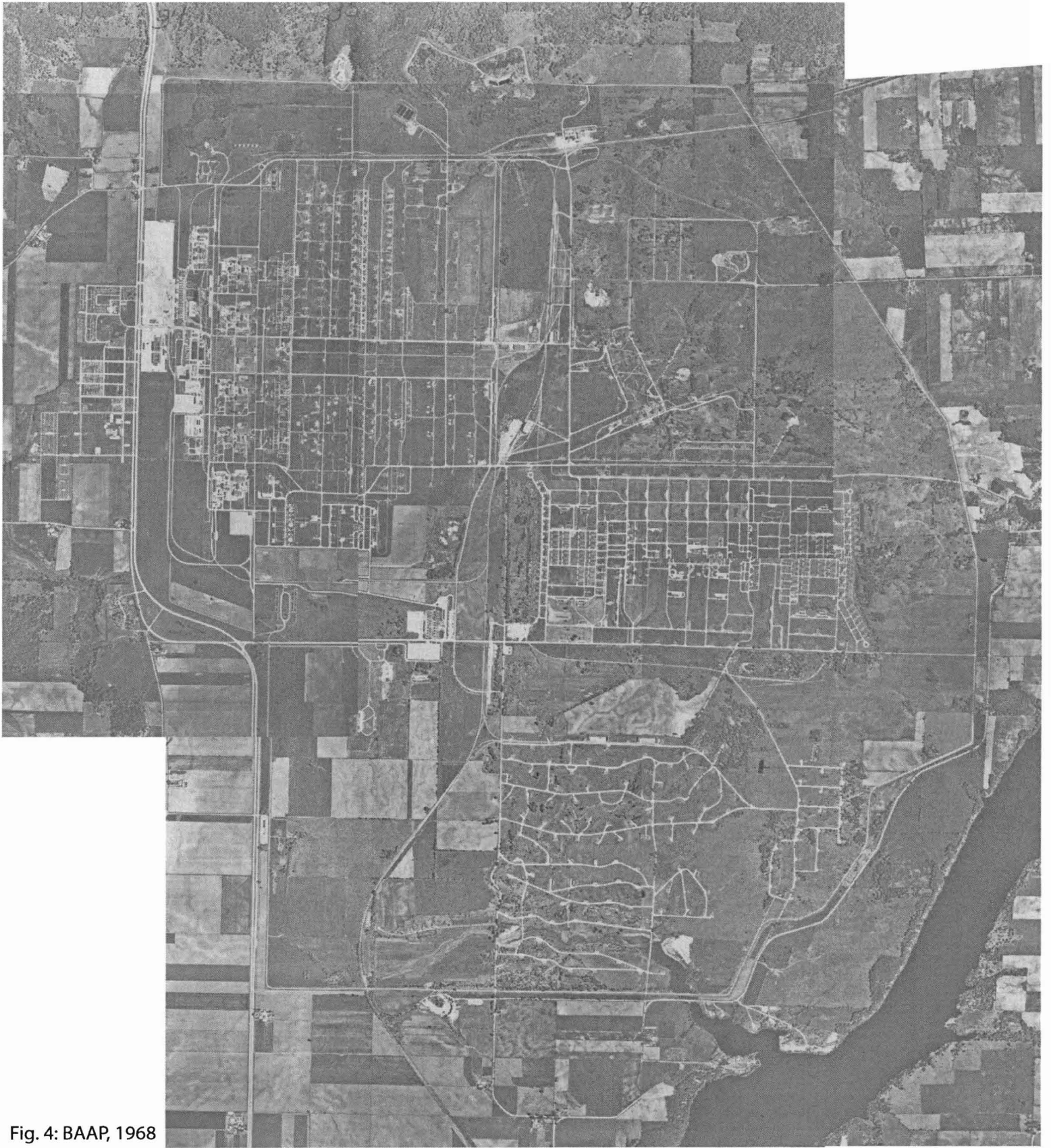


Fig. 4: BAAP, 1968

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USDA

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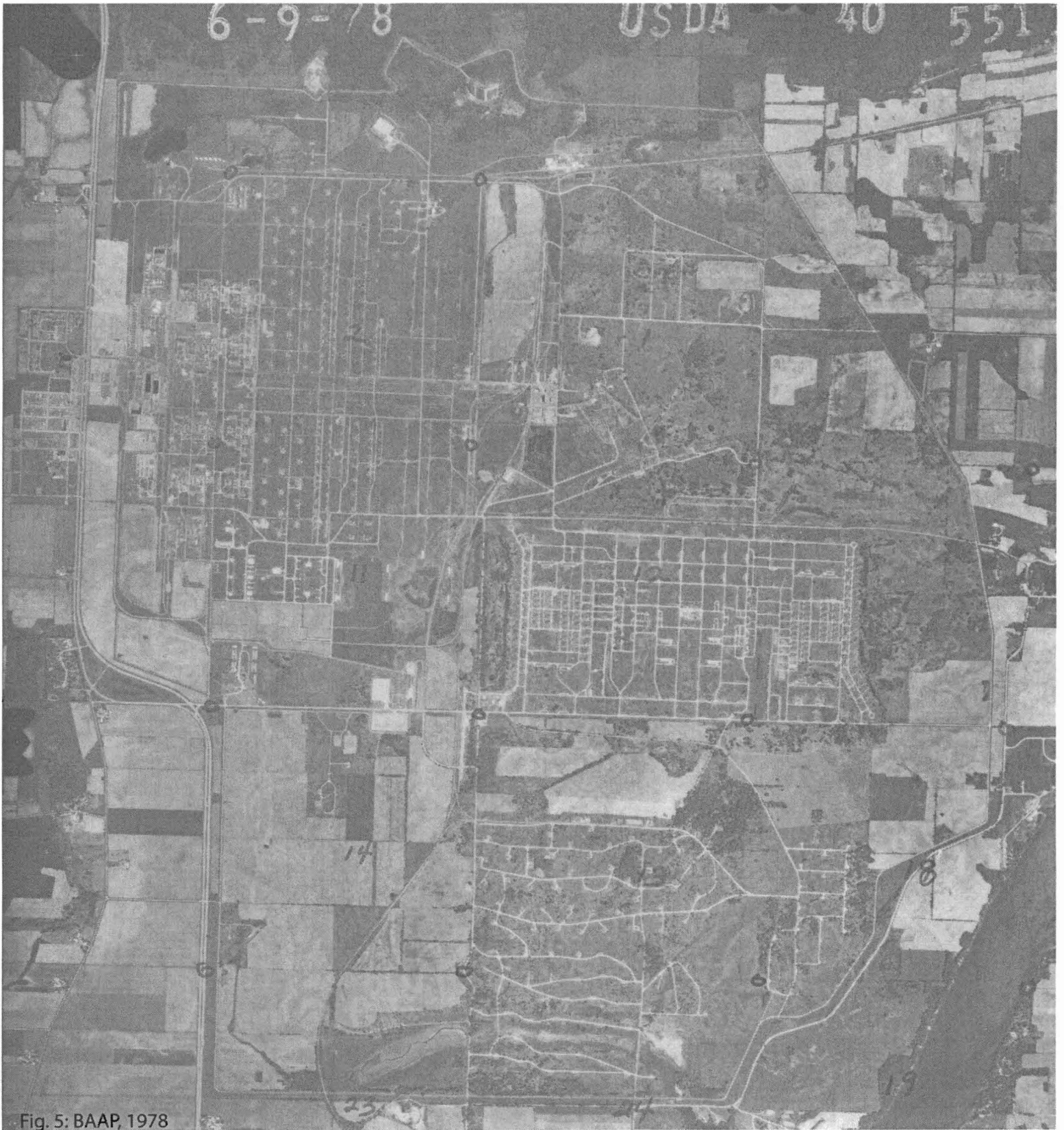


Fig. 5: BAAP, 1978

NAPP

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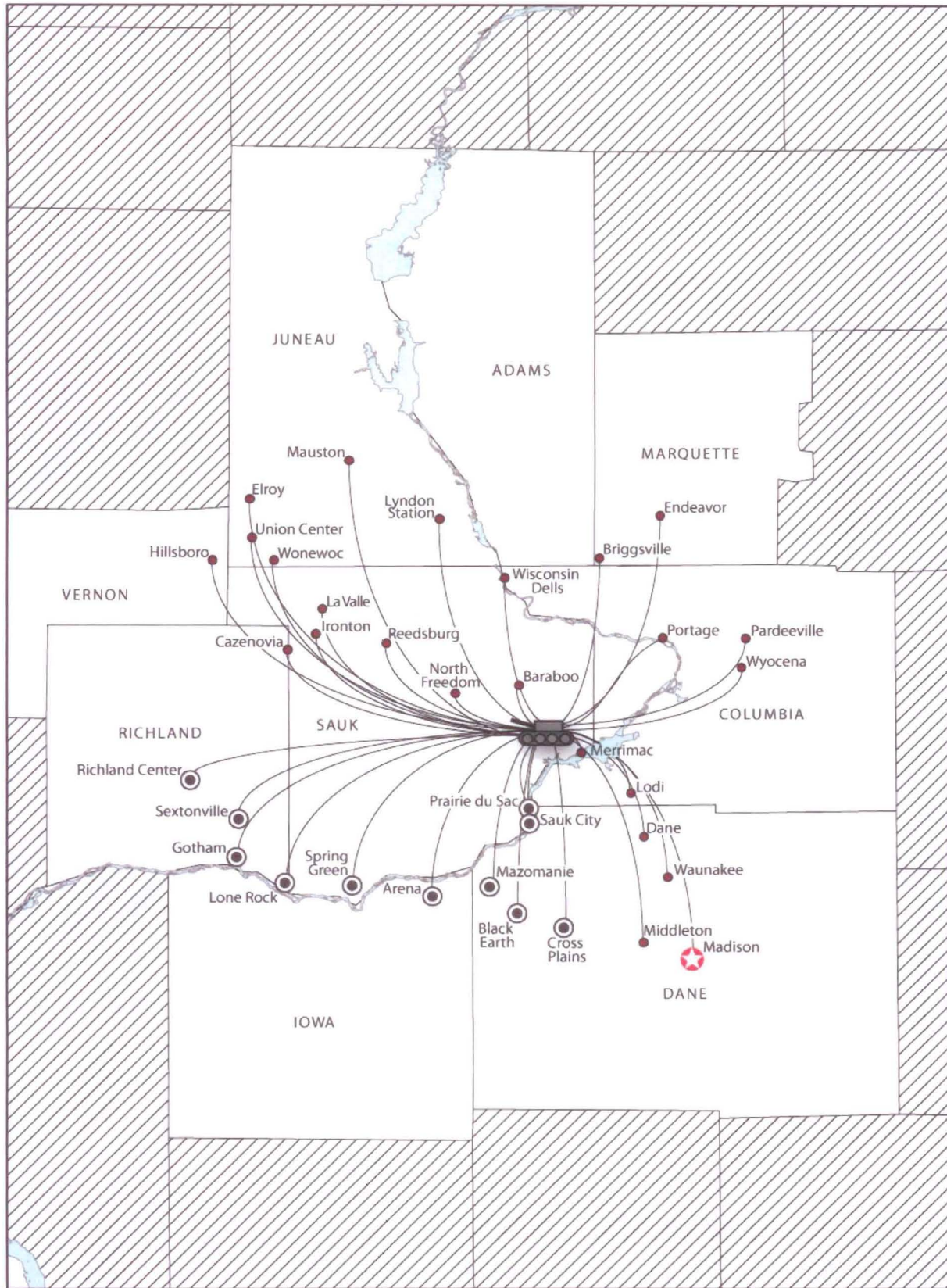


Fig. 6: BAAP, 1992



Fig. 7: BAAP, 2008

Communities Serviced by BAAP Bus Service, 1943




- Communities serviced by BAAP
 - ⊙ Lower Wisconsin Riverway Communities serviced by BAAP
 -  Badger Army Ammunition Plant (BAAP)
- 10 5 0 10 Miles

Fig. 10

Wage and Salary flow from BAAP to Surrounding Counties, 1974

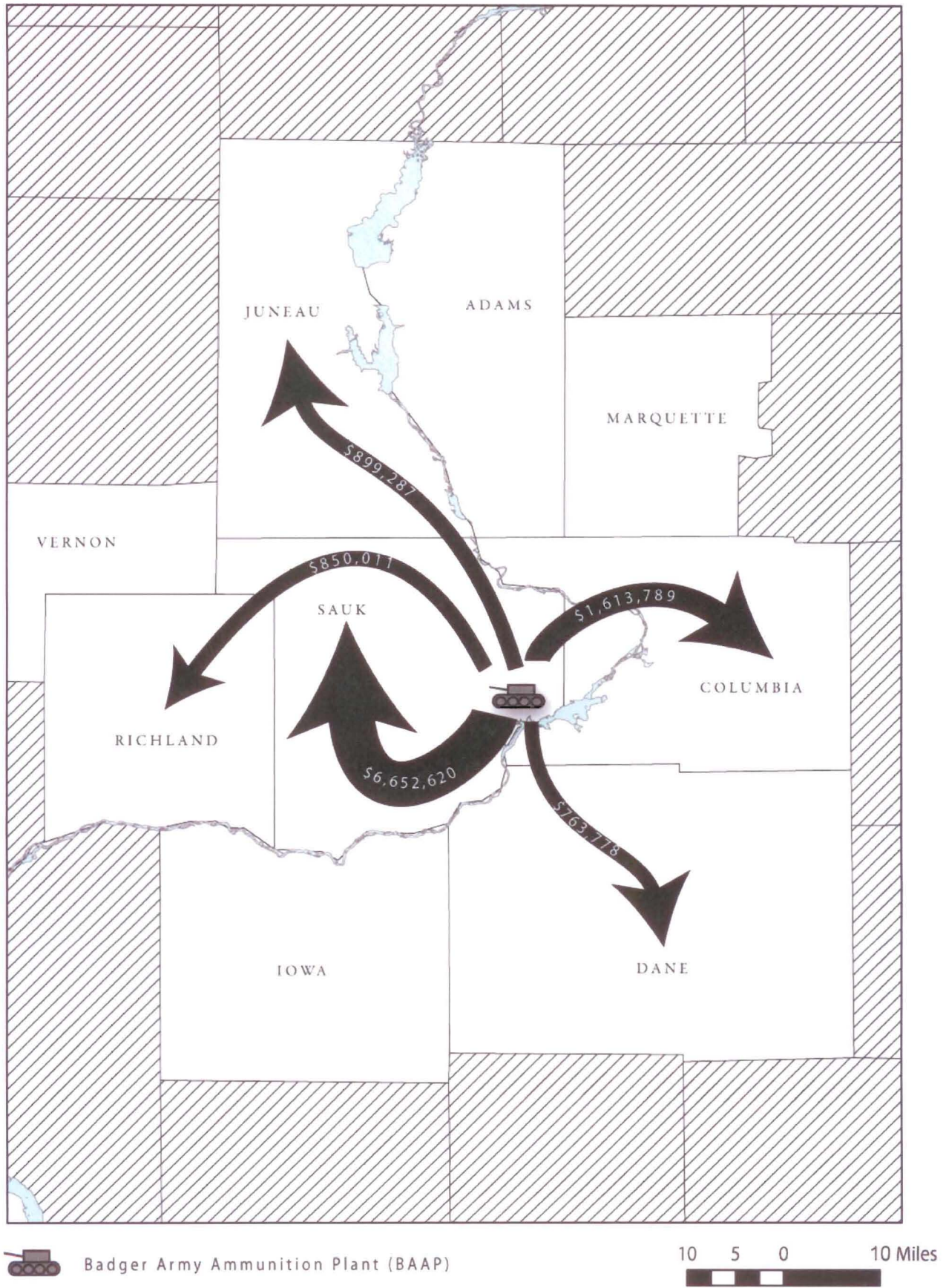


Fig. 11

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