

Early Sketches of Fergus Falls USFWS Prairie Wetland Preservation Program
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by
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To put a long-term perspective on this recording, I've included the following:

Tom Schrader in 1955 wrote a comprehensive historical accounting of marshland drainage as it advanced from northern Iowa to the deep fertile soils of southern Minnesota, then into the less fertile, easily erodible soils of western Minnesota. Part of his writing applied directly to early-day thinking and now directly to the perspective of urgent need for preservation of those potholes and marshes that still remained. An essential part of that writeup read:

“The trend in land-use development was reversed during the 1930's. Millions of acres of land throughout the Midwest were removed from production in the attempts to reduce crop surpluses. At the same time (the 1930's) the severest drought in 100 years made water one of the most precious resources of the region. Drainage ceased almost entirely, and the State and Federal Governments spent millions of dollars to conserve water. The Fish and Wildlife Service and many of the State conservation departments acquired many drainage enterprises in order to plug the drainage ditches, conserve water, and restore marsh habitat for waterfowl and fur-bearing animals.

“Those who participated in the water-conservation programs of the 1930's were appalled to discover shortly after the end of the Second World War that drainage was again assuming important proportions in a region where, such a short time before, water was considered so precious.

“It soon became evident that drainage was snowballing. Under the impetus of high farm prices and Federal subsidies, there was a natural incentive to put every acre into crops, and new drainage ditches appeared in great numbers throughout the pothole country.” (1)

This is where this part of the story started. But the full scale small wetlands program had not yet developed and long before it was underway a multitude of preliminary steps had taken place. The nation-wide wetland inventory was just being completed and primary zones for wetland conservation were being mapped. There was developed within the prairie zone of western Minnesota and the Dakotas the wetland conservation zone to be forever dubbed as the Prairie Pothole Region. For Minnesota the Prairie Pothole Region extended from East Polk County in the north southward to include two counties south of the Minnesota River, specifically Lac qui Parle and Yellow Medicine. Two isolated, heavily drained counties – Jackson and Cottonwood – were added based on one of those political administrative calls.



Fig. 1. Map of major prairie pothole region in the United States, showing the general area.

(3)

Journal of Wildlife Management, Vol. 28, No. 3, July 1964

This zone – the Prairie Pothole Region – a major part being located in the Dakotas, covered some 50,000 square miles. It now required ways and means to conserve that region's vital prairie wetland resource.

As a trial balloon, I was assigned to Fergus Falls, Minnesota, to explore the possibilities of offsetting the rampant drainage of this important waterfowl resource and to determine what might work to assure their long-term care. As Tom Schrader, our regional chief advised, "keep looking."

Initially, this assignment entailed liaison on waterfowl/wetland details with the Soil Conservation Service, the agency at that time promoting layout and planning for wholesale drainage of prairie marshes. Our job, in contrast, was to preserve those prairie wetlands. It was obvious at the outset this was going to take a lot of doing.

Our first small scale 'office-of-types' was in the Soil Conservation Service (SCS) Area Office. There, it seemed to me, this lone operator was squeezed between a couple of file cases. Obviously, I was the low man on the totem pole in these surroundings. This assignment was going to take a lot of diplomacy, tact, patience, tolerance and education to change a 1954 drainage-oriented SCS. My strongest allies at that time within their system were two area soil scientists – soils men that looked at the widely varied landscape from a specific soil association's inherent capabilities – not from an administrative call. Roy Erickson and Hans Latvola were two of the best, indirectly helping me get underway to aid the conservation of vital prairie potholes and marshes. It was good to have allies at that start-up time.

Not for long did I sit between those file cases in the SCS Area Office. My West Virginia mountaineer spirit came to the fore. My state motto is *Montani Semper Liberi* (mountaineers are always free) and something had to give. There was a big and varied public out there – a wide ranging public that daily was being influenced by a widespread valuable wetland resource around

them. Values of wetlands were seldom considered by many. All the while in these early days numerous changes were being wrought on the land and the smaller communities.

Our start in Fergus Falls was in 1954. Shortly after, we observed the transition from small farms to larger and larger operations. With that change out went the homesteads – their original sites all set for the plow. Protective shelterbelts (that pheasants loved) were cut, their stumps removed. Marshes in these larger farming units were drained widely, their uses being adapted to the machine rather than to the land's capability for sustained production. Wind and soil erosion ran rampant on the slopes of this light-soiled, rolling terrain. Soybeans and corn production moved steadily northward up through western Minnesota. Original diversified landscapes shifted widely to monocultures.

For waterfowl and wildlife biologists those increasing monocultures were depressing. As my good friend, ecologist/waterfowl biologist Harold Duebbert, frequently commented – “...walking into a monoculture I became depressed, my lab was depressed, his tail drooped – all was not right with his world. Familiar waterfowl and wildlife smells were absent. When we shifted onto lands with a mixture of crops, marshes, potholes, weeded fence rows, coulees, and well planned shelterbelts, he came alive, I became alive and we were ready to go.”

Along with changes on the landscape, rural schools, churches, and small rural communities declined.

About two years after our family's entry onto the Fergus Falls scene we witnessed the decline of the annual family oriented tradition of waterfowl hunting on many of the better hunting passes and points on Ten Mile, Mineral, Swan, Wall, Lightning, Ash and others. Gala family parties, built around long-held waterfowl hunting traditions, just sort of disappeared down the drain. Those bleaker fall periods were common in many of the western Minnesota prairie pothole counties. A pleasing balance to a way of life had been lost.

On the bright side it was fortunate when we arrived (1954) to still have those numerous rural schools, rural churches–groups to work with. A short time later they were not there. From that standpoint timing for entry to this part of the Prairie Pothole Region was opportune.

Here loomed what was to be my first major work program. Armed with a working colored slide series on conservation aspects of prairie wetlands, I forged forth – forth into untold scores of nighttime meetings in rural schools – schools still active in 1954. Our audience was varied – young kids, babes-in-arms, parents, grandparents – all of whom lived on farms where the prairie wetlands were located. Older residents knew the long-term qualities and usefulness of those wetlands. For many these were the moisture-laden sites that brought them through the drought years of the “dirty 30's.” This was but one example of a widely ranging public that needed specific attention.

Another oddity prevailed in 1954 and into the late '50's. The country was in a stage of heavy crop surpluses – so why drain important potholes and marshes while in a state of surplus? The prairie zone is known to be widely variable from year to year – the dry cycles being the rule rather than

the exception to the rule. Therefore, why drain the area with the best moisture holding capacity. These were the insurance sites against a total disaster. Should this often total loss of wetlands go by the board without a fight? Post World War II years saw the increase of big equipment for farming. For many, most any marsh was considered to block their orderly passes. A mentality prevailed that we will adapt our land use to the machine rather than the reverse of adapting the land use to its capabilities. Yet, ten years after World War II, drainage of prairie marshes and potholes soared.

At this time, during my low periods, I found myself agreeing with the philosophy of E. B. White. As a lead-in to Silent Spring¹ his quotation read:

“I am pessimistic about the human race because it is too ingenious for its own good. Our approach to nature is to beat it into submission. We would stand a better chance of survival if we accommodated ourselves to this planet and viewed it appreciatively instead of skeptically and dictatorially.” E. B. White (2)

But don't dwell on it. Get with it.

Yet, still on the bright side in the mid-1950's we had several other factors working in our favor. Distributed in western Minnesota and eastern North Dakota were several early stage TV and radio stations – stations with personnel that were now looking for programs to fill public service needs, these to balance their regular programming. Many welcomed information related to wildlife, waterfowl and overall use of the land. This was pay dirt and not all that difficult to prepare for. Those outlets were priceless.

Fargo Radio Station WDAY (at the time) had a veteran duck hunter as its owner and his station was a regular outlet for our constant message. With his backing we moved in with a regular weekly wildlife/waterfowl interview session with the full Department of Natural Resources cooperation of Bob Farnes, Gordy Nielsen, Norm Ordal, Morris Patterson and a host of others. We would tape and record about four at a time. We could plan that easily. Always, and I emphasize always, the role of the prairie wetlands was woven into the story – a story that not only included waterfowl but prairie chicken, sharptails, deer, pheasants and all the rest.

Downtown Fergus Falls was not going unscathed and free of the prairie wetland story. Civic groups – Rotary, Kiwanis, Lions and others regularly requested programs for their noonday meetings. Lots of dyed-in-the-wool duck hunters (and good ones) were in those groups. Reception to the presentations was always considerate, interested, polite and ready for another later one. A rigid rule I imposed on myself was to never give a “canned talk.” Basic points were always there but were varied and timed to fit specific occasions. Always, prairie wetland conservation in some manner was woven into the presentation.

¹Carson, Rachel 1962. Silent Spring. Houghton-Mifflin Co., 67 West 44th St., New York, NY.

Kiwanis, Rotary, Lions, church groups, high schools, and nearby colleges welcomed presentations that bore down on care of all natural resources – resources in their own backyards. Within these varied groups there were strong local leaders, editors, outdoor writers, farmers, sportsmen, business people and a few like Muggs Townsend that had been deeply influenced by the dedicated stewardship of Richard J. Dorer, commonly known as the 'Father of Minnesota Wetlands'. The Prairie Pothole Region story was shot across bars, into PTA meetings, church basements and county boards throughout all of the 19-county western Minnesota working area.

Bud Gorham, Alexandria TV's sportscaster, was an excellent cooperater. Anytime I could come up with something new, it was off to Alexandria. There the Prairie Pothole Region story was telecast time and time again after the 10:30 p.m. news. All positive attributes of those prairie wetlands continued to be shown across Minnesota.

So all of a sudden here is this four-year World War II veteran, waterfowl biologist, wetland mapper shifting from previous roles to that of rural and civic waterfowl educator, civic club lecturer, TV personality, and radio waterfowl/wetland interviewer. All the while, along with this, preliminary offices were being set up in the Dakotas with Ellison 'Bull' Madden at Devils Lake, North Dakota; Art Stone at Aberdeen, South Dakota; Ken Black, Watertown, South Dakota; and Bob Panzner, Benson, Minnesota. Others later included Bill Sweeney, Milt Reeves, Clyde Odin, and George Jonkel. B. W. 'Burt' Rounds was named as supervisor of this wide ranging group of waterfowl biologists. 'Burt' did an excellent job. He caught all the flack from the field men yet had all the pressure from above. Admirable accomplishment on his part.

Not only was a wetland story being told in the Prairie Pothole Region but from Atlantic coastal zones to the Pacific shores states had begun 'to draw a line on a map' identifying where wetland conservation should receive top priority. It was always one of my basic thoughts that nothing ever happened with conservation of natural resources until there was a 'line on the map'. Things were looking up. There was a solid move afoot. Great! As it worked out, nationally the Prairie Pothole Region was to receive top priority. Strong backing had always been up front with Daniel H. Janzen, who had served as Regional Director in Minneapolis and now was the Director of the U.S. Fish and Wildlife Service in Washington. Dan had grown up in heavily drained southern Minnesota, knew the history of land use, drainage and wetlands. As drainage after World War II flourished, when drainage was mentioned he became 'hopping mad' (as described by writer Clay Schoenfeld).

At this stage a bit of prairie wetland conservation history unfolded at Fergus Falls. James T. McBroom, a key figure in the initial nationwide wetland inventory, now had the responsibility of getting the conservation of the prairie marshes tied down to the land. One June day in 1957 (circa), he and a young chap from the Bureau of the Budget came to Fergus Falls with the explicit purpose of taking a close look at prairie wetlands in this part of the Prairie Pothole Region. So we rolled up Highway 59, cut through northern Becker County (still with the best marshes left around), into Mahanomen and East Polk Counties. Scattered here and there were excellent marshlands with ducks, shorebirds, coots, rails and all the rest directing our attention to their natural home. On many, a Minnesota wetland marker indicated a marsh complex now in public ownership. I could practically hear the wheels turning in McBroom's head as he viewed these

natural conditions. After traveling a few more miles his thinking came out—"Why can't we (the U.S. Fish and Wildlife Service) come up with something like that." Our tour continued as I steered him through the best remaining wetland zones of Becker and Otter Tail Counties. Late in the day we ended up at Lois's (Lois Mann) dinner table. We batted the day's events around a bit then abruptly McBroom asked the young Bureau of Budget man – "What's it going to take to get something going to conserve those vital prairie wetlands?" Reply: "You're going to have to get money." This guy didn't prolong discussions.

Not letting myself get bogged down on administrative matters, it was not long before \$105 million had been allocated for the Prairie Pothole Region small wetland preservation. Those funds were to come from anticipated duck stamp sales.

One nearly hidden bit of history for Prairie Pothole Region wetland preservation had been enacted at that Fergus Falls dining room table.

With that event activities mushroomed within the prairie zone. One of my high priority duties was to make sure that we had full (blanket) approval to move actively with landowners in that county. Five signatures were required on that approval – five signatures in each of our 19-county western Minnesota working area. I had obtained county board approval from 18 counties. The last now coming up was Otter Tail County where our office was based. The meeting date was set. Participants converged in the Otter Tail County Courthouse for the final go. We were fully aware that one board member had been stirring up all kinds of opposition to this conservation program. Outcome of my presentation and board approval was going to be on shaky ground. I proceeded as usual but could sense the opposing board member had done his homework and the outcome of the decision was noticeably a questionable one. Board members deliberated awhile – back and forth. Now it was time for the vote – approval or disapproval.

At this point a new twist came out of the blue. Just ahead of the vote the Board Chairman, Harvey Morrill, a proponent, dropped this sideline comment: "You know that Lois Mann was the lady that taught my granddaughter how to knit in the 4-H program . . . and that's great . . . it's a good sign. I suggest we approve this U.S. Fish and Wildlife Service small wetland conservation program." The Otter Tail County Board approved our request – not on waterfowl facts, water conservation and other points of our ordinary pitch – but on the basis of Lois's knitting skills passed on to one granddaughter. Not the customary route but it did the job. (Our thanks to Lois.)

At this stage we were still on the front edge of the full-blown prairie small wetland acquisition and easement program. Not only was the Prairie Pothole Region publicity getting around regionally and nationally but was now onto the international scene. Land of the Prairie Ducks, now completed, carried a hard-hitting wetland conservation message. Film libraries of the Agricultural Extension Service, U.S. Fish and Wildlife Service, Department of Natural Resources and the Forest Service were swamped with requests for the film. A national conservation award for Land of the Prairie Ducks stepped up the demand even further. Dale Sanders had done an excellent job on it. He followed this with another wetland habitat documentary titled Swamps, Bogs and Marshes. It likewise was well received and used extensively.

As time moved along, I had always kept in the back of my mind a quotation:

“... If matters are to be so arranged, it will need the active understanding and sympathy of a very large number of people.”

Then one day word came from H. Albert Hochbaum at Delta, Manitoba, that the Canadian Broadcasting Corporation (CBC) was to do a major telecast on this waterfowl-wetland habitat. They would like our USFWS contribution to that filming.

Within a few days they were well into filming another version of the prairie pothole region story. The CBC crew landed on our doorstep in Fergus Falls and for a few days it was a hectic move to provide what this crew was looking for. Hochbaum, the artist-author-biologist, was serving as technical coordinator. His views rarely meshed with the director-photography chief. For anyone in between it was usually a question of laying low when the cross-fire started. Hochbaum was up at the crack of dawn, always pacing the pavement to get going. Often at midnight the crew was still filming prairie region maps and interviewing personnel. They left. What they would end up with was a major question. I viewed the production in Winnipeg and their film presented several sides to the waterfowl story. Later the CBC Times of April 16-22, 1966, carried the following review of their U.S.-Canadian prairie pothole region production. That production was titled Once Upon a Marsh and good, bad or whatever – it was telecast steadily across the Canadian prairies.

Thus it was that now the Prairie Pothole Region story was onto the international scene. This was one lead onto the international picture. Another was to follow, not a predictable one but one with parts helping to bolster arguments for saving prairie wetlands.

I had written this already on November 14, 2001, so I'll not change from the original. For me, that had a decided humorous twist, a twist grading into the hilarious. My original was Between Two Fires - International vs. Local. As written:

First, a little background on our working headquarters – Fergus Falls, Minnesota – to put this story in perspective. At this time there was probably not a more conservative town in western Minnesota. Government programs coming onto the scene were looked at askance. Yet, here we were an expanding small wetlands preservation operation, with our 19-county headquarters office located in the city center. This was no longer a single person exploratory program but one that had overnight expanded with some 16 employees – appraiser-negotiators, waterfowl biologists, engineers, clerical staff. We were visible. Nearly all were in government vehicles of some type – all clearly marked with signs on the doors:

U.S. FISH AND WILDLIFE SERVICE U.S. DEPT. OF INTERIOR
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As supervisor of this operation, I cautioned all to keep their operations efficient and well beyond reproach.

That's a sketchy background. Now to the immediate story with this sidelight. The sidelight was that when there were international personnel coming to view our operations, I put routine matters to one side and concentrated on what their interests were. Now to the story:

Regional Director Bob Burwell called and mentioned they were sending a Swedish television crew whose aim was to photograph the prairie marshes of western Minnesota and the Dakotas. Their initial stop was to be in Fergus Falls. They arrived with all their equipment and I picked them up at the local motel in the government station wagon (with its official designation). This was mid-day in July and they were all set to start filming. It was also one of the hottest days that we had all summer. Anders Malm, the leader, suggested that for lunch we have a picnic. "That's fine, we'll have a picnic on one of our more scenic marshes." But then he added – "with beer." Now that's a new dimension. We're all in that official government station wagon. Now what to do?

One circle around the block and I dropped off Anders at the municipal liquor store. After two or three more circles here and there it was back to the liquor store. Luckily, by that time Malm had his case of beer. We loaded quickly and I thought we were in the clear for the 'picnic.' So I thought. To get out of town we had to go down the main street of Fergus Falls. About half way through the main part the thirsty crew couldn't wait with that cold beer at hand. Off came the tabs, beer cans were held out the windows, frosty foam from the cans rolled down over the sides of the government vehicle, including the Official U.S.F.W.S. insignia. By now all the doors were covered with beer foam. I sped up. Just a few more blocks. The tie-up:

Here was this principled supervisor of this expanding governmental operation in this strongly conservative town, a staunch Methodist on their Board of Trustees, now caught between local operations and international affairs having what appeared to be the makings of a full blown beer party down the main street of Fergus Falls.

Luckily, we made it out of town. International aspects won out. We had our picnic and the TV crew didn't want to leave. And they didn't. They spent all their allotted schedule right in Otter Tail County – not moving from Fergus Falls and its municipal liquor store.

Another sidelight to this story: There was indirect profit to us in our local wetland preservation program. While this TV crew photographed the marshes with their waterfowl, wildlife and overall scenic beauty, I photographed the crew in action. Those slides were used in hundreds of meetings later with the following argument for preservation of prairie marshes: "While many in western Minnesota only look at these potholes and marshes as something to be drained – we have

this Swedish television crew coming all the way across the Atlantic to mid-continent into the prairie pothole region to photograph their beauty, utility and need for long-term preservation – and they carried this documented visual story back to Sweden and other Scandinavian countries.” We were working in largely Scandinavian communities and this line of argument, at least, pricked many a conscience up and down the pothole region of western Minnesota. So much for international affairs.

As the major acquisition and easement program was developing, some kind of an office was needed. It was then that John ‘Jack’ Townley, Postmaster at the time, suggested I move onto the 2nd floor of the Federal Building. Off I went with an old Royal typewriter and a small file case. It was a small room to start with. Then it started to fill. Game Management Agent Joe Hopkins set up a desk, Norm Ordal of the DNR moved into another corner. Soon we had a trio in tight quarters making a stab at getting some ‘earth-shaking’ job done. Hopkins was followed by agents Dave Fisher and Dave Swendsen. Fortunately, there was lots of ‘out time’ for all where events were actually happening.

After a brief period when we were moving into the front edge of the expanded program, we set up an office on the 2nd floor of the landmark Skogmo Café. In front, a big rangy Chesapeake – ‘Bobo’ – held forth.

An incident, scarcely typical of an ordinary day in the life of a prairie wetland conservationist, came to the fore while I pulled these thoughts together. This event occurred while in the Skogmo Café office arrangement. While working on some detailed wetland conservation matter, I glanced up and there stood the widow of Nat King Cole, the famous singer. Her husband died not long before and she was traveling around the country. She was by all standards a beautiful, striking and gracious lady – one who visited easily with this guy in field clothes, muddy boots and all the rest. It was a mystery to me why she had ended up on the 2nd floor of the legendary Skogmo Café in Fergus Falls, Minnesota. From our discussion I learned that she had been traveling around the country and while doing that was looking for a special conservation mission that she could become involved with. Another one of those mysteries of life. I came up with a few thoughts on prairie activities of Nature Conservancy, Ducks Unlimited and a few others. She departed and headed out to explore her potential conservation missions. Another odd event amongst hundreds that made these early days challenging, humorous and demanding.

Now to the main job. With full approval of all 19 counties, there was one important (most important) task to complete – to establish a sound waterfowl biological base upon which to launch the overall acquisition and wetland easement program. I wanted no part of a hit and miss program that shot aimlessly here and there at wetland conservation. Those allocated funds should be spent wisely.

So into our next step we incorporated sound waterfowl production facts from on-the-ground marsh slogging details learned from the Waubay, South Dakota, Waterfowl Production Study – an intensive piece of field work, invaluable in our next highly important step. Background for this next venture:

- Aerial photo coverage for much of our important area was outdated as drainage had advanced so rapidly that full pothole-laden townships were obliterated. What was left in 1961 was our need – not what was there originally.
- With that situation we took to the air and carried out a section-by-section coverage of the 13,000 square miles of Minnesota prime pothole range.
- This procedure was described in the Journal of Wildlife Management under the title of Improved Techniques for Aerial Wetland Surveys (1964).
- Wetland priorities plotted on township plats served as the major acquisition guide for the small wetlands program.
- Armed with those township plats showing priorities, appraiser-negotiators took to the field and proceeded within those priorities.
- Another advantage: Acquisition was not shut down during the winter when the pothole range was covered with a foot or so of snow. Check the plat. If high priority, the decision was 'all go'. That decision could be made right in the office.
- Consider in 1961 none of the tools available in 2003 were even in a dream stage of some inventor.
- This was the best technical move made to make the program move easily – one well within a planned waterfowl biological base.

I've clipped and included here a few of the details in the published report. (3)

The area



Fig. 1. Map of major prairie pothole region in the United States, showing the general area of Minnesota surveyed by the reported aerial technique.

Pattern of flight

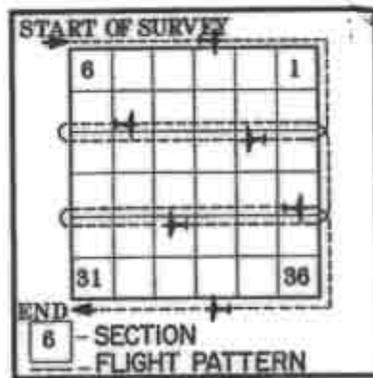


Fig. 3. Township grid showing pattern of flight used in rapid aerial wetland survey method.

Mapping symbols used in survey

Table 1. Maps symbols used for aerial wetland survey of the western Minnesota pothole zone.

Symbol	Meaning
A	"A" priority proposal—acquisition recommended now
B	"B" priority proposal—acquisition recommended now
C	"C" priority proposal—no acquisition recommended now
CA	Check 4-inch-to-the-mile photos for water concentrations—top-quality acquisition possibilities in this section
I	Type I wetland (temporary)
III	Type III wetland (shallow marsh)
IV	Type IV wetland (deep marsh)
V	Type V wetland (open marsh)
E	Easement possibilities in this area on survey date; concentration of small water areas, mostly of shallow types
X	No acquisition possibilities in this section
T	Likely tiled
F	Marsh farmed on survey date—no acquisition recommended due to lack of permanence
B(dr)	"B" priority acquisition proposal, but is partially drained
IP	Impoundment possibilities from aerial inspection
(Wetland symbol)	Minnesota Conservation Department wetland projects at time of delineation
DR	Drained wetland area or drained general area within this section
HDR	Heavy drainage of marshes
F	Area likely mounded
NA	No acquisition recommended on specific sites

Experience of observer

The two observers conducting this aerial work had extensive ground experience with prairie wetlands, and their thorough background knowledge of the working area helped save time. Factors of waterfowl production, land capabilities, and drainage vulnerability were all generally known before the survey was started.

Only pilots fully experienced in low-level reconnaissance were used. This selection of pilots increased efficiency, provided safety, and improved the final results.

Results of survey

Completed township plat sheets with standardized survey information provided a biological base for the start of systematic negotiations for purchase of fee title and easements of waterfowl marshes in the 13,000-square mile, western Minnesota pothole range. They also served as an excellent base for coordination with the Minnesota Conservation Department's wetland program.

There were interesting people involved in that aerial work – Joe Devorak being a standout. Joe handled the Fergus Falls Airport as manager, supervisor, crop sprayer and charter pilot. Joe was a natural, relaxed pilot of any plane that we flew. Often I made the claim that Joe could fly upside down in the wildest of storms and not be phased in the least. But rest assured before we ever left the Fergus Falls Airport, Joe would tune in the latest weather report. If not to his liking, that trip was canceled. No question. On top of his qualifications, Joe knew the country and was an excellent observer for our mapping. Great guy – Joe Devorak.

Now with 13,000 square miles mapped with a clear-cut waterfowl biological base and funds allocated, the early-day lone operator status disappeared. Appraiser/negotiators, biologists, clerical help and surveying crews moved onto the Fergus Falls scene of operations. They were ready to go and did.

It's here where I get into big trouble – when I start on names that have contributed so much to get things underway. There will always be those not listed in the parade of workers. To those my apologies. A few: Betty Schoephoerster put all those early township plats in order. Dorothy Carr assisted. Ethel Pederson and Ruth Steussy later added their highly competent long-term skills. George Gard helped to complete the few final townships of the aerial survey and handled early management projects. Later he was followed by Lou Swenson and Marv Mansfield. Without detail, a list: Larry DeBates, Gilbert Key, Philip Aus, Rolf Wallenstrom, Ben Lukes, Bob Freeman, Richard Fihn, Bob Robinson, Clyde Schnack, Carl Rasmussen, Ken Ystesund, Ray Schumacher and Bruce Mortensen.

Buried in the background of most major conservation movements there are unsung heroes, those who have not made 'many waves' nor received publicity but have contributed heavily to a specific cause. For this record of events I've included one.

Along with all of the wetland educational efforts of the late 1950's at Fergus Falls, I had kept a steady flow of short articles on the Prairie Pothole Region, articles regularly published in the Minnesota Conservation Volunteer, Naturalist, American Forests and others. My writing was quite ordinary but this is where Arne Arneson came into the 'hero picture.' Arne was a Fergus Falls civil engineer with the Otter Tail Power Company, a man professionally recognized, an engineer with a broad range of outdoor interests and experience, one with a dedication for conservation movements of worth, particularly if they were a part of his own Otter Tail County 'backyard.' Here Arne came to the fore and rescued me with his drafting skills. He would always come up with a professional touch to our maps and various figures in the articles. With his drafting skills added, my ordinary Prairie Pothole Region articles 'came alive.' Sparked with Arne's critical touch they looked fully professional and provoked many readers to look into the article's content.

Another note of background with Arne: Based on close association with Arne, I learned of his philosophy toward his lifetime work. Hearing that from him, I coined the term Ecological Engineering and an article was prepared under that title. It was published in a 1966 issue of The Naturalist. In this article one noteworthy prediction was made by the President of the World Wildlife Fund. His prediction: (4)

“Ecology, in the next 10 or 20 years, may well become the most popular of sciences – a household word to those masses who today are ignorant of both the word and its meaning.”

It is interesting to consider this 1966 prediction in the light of today's 2003 ecological events, both the good and the bad, four decades later.

A key thought, as expressed by Arneson, spoke of a needed philosophy for all planners. As stated:

“... final projects will be influenced, not only by the engineer's technical knowledge and skill – but by his philosophy, his appreciation of other resource values, and his sense of responsibility for these values.”

For me, at the time and right now (2/9/2003), Arne Arneson's statement of needed engineering philosophies was equally important to that of the President of the World Wildlife Fund. Should we not consider completely Arne's advice for all engineering and waterfowl biological planning?

There are many bright spots to my 2003 conclusion for this review of early events emanating from the USFWS prairie small wetland conservation program. While serving on boards of Nature Conservancy and Sig Olson Environmental Institute, and working as a consultant with National Audubon Society, I've observed at close range actions, dedication and zeal of both young interns and full-time USFWS, Dakota and Minnesota Game and Fish Department employees. They were consistently coming through with sound, carefully considered judgments on controversial issues. Their dedicated actions, for me, have been heartwarming.

One example of the preceding: Larry DeBates sent to me a copy of the following Minnesota Supreme Court 1976 decision. This was a decision disallowing the construction of a highway through William Bryson's marsh which he brought suit to save. Larry earlier had spent lots of field time with Bryson. Bill Bryson had been an excellent landowner-cooperator, a cooperator warranting lots of detailed attention. Then years later here it was in black and white, in extra bold print, lots of familiar arguments for saving wetlands, arguments that came from Larry DeBates and were now woven into the legal track of a Minnesota Supreme Court ruling.

Larry DeBates earlier was one of those young, dedicated waterfowl field biologists that worked out of the Fergus Falls USFWS office, gained additional experience and moved into key management assignments where his past experiences were plugged into important decisions. Thus it has been with an array of dedicated young people trained academically at excellent schools across the USA. Field experiences from there on balanced academic backgrounds. Fergus Falls

To some of our citizens
a swamp or marshland is physically unattractive,
an inconvenience to cross by foot
and an obstacle to road construction or improvement.
However, to an increasing number of our citizens
who have become concerned enough
about the vanishing wetlands to seek legislative relief,
a swamp or marsh is a thing of beauty.

To one who is willing to risk wet feet to walk through it,
a marsh frequently contains
a springy soft moss,
vegetation of many varieties,
and wildlife not normally seen
on higher ground.

It is quiet and peaceful
- the most ancient of cathedrals-
antedating the oldest of manmade structures.
More than that, it acts as nature's sponge,
holding heavy moisture to prevent flooding
during heavy rainfalls and
slowly releasing the moisture and maintaining
the water tables during dry cycles.

In short,
marshes and swamps are something to protect & preserve.

*From the Minnesota Supreme Court's 1976 decision
disallowing the construction of a highway through William Bryson's marsh,
which he brought suit to save.*

has served well to provide those on-the-frontline experiences. Western Minnesota has had a goodly share of University of Minnesota wildlife graduates serving both in the Minnesota DNR and the USFWS. They have been real assets to the organizations with which they worked. Chuck Vukonich at Fergus Falls is a good example of this steady parade. There will be others to follow. These well-trained young women and men have 'picked up the torch' and are carrying on the long-held traditions of conservationists of the past.

On this concluding part of a 2003 review of early-day events of the Prairie Pothole Region, I'll close with one personal bit of writing – writing as I've commented to long-term field companions Jerry Olstad, Harold Duebbert and Larry Furo – just two paragraphs that took "30 years experience on the prairie to write."

Toward a balanced landscape –

“... Secure the stream valleys. Protect their wooded bluffs and coulees. Adjust uses of bottomlands to minimize flooding losses. Protect prairie marshlands, natural reservoirs holding water on the land. Farm the best land. Retire the poor land, adjusting it to more appropriate long-term uses. Permanently protect from wind erosion the prairie light-soiled prairie zones. Assure a long-term distribution of marshes within all zones; this to add a degree of diversity to all locales. Reject the thinking that a person can always travel to the next farm to enjoy green space; replace this with concepts assuring well distributed wetlands and other green space on all ownerships. Plan with zones and goals to show where man should not trespass with certain operations. But, at the same time, constantly plan realistically to show him where he can proceed within natural constraints of the land and within long-term national interests.

“Wetlands and uplands of the prairie pothole region are always intermingled. Thus, total land use of a specific locale plays a key role for retention of prairie wetlands. That tie is inseparable.”

With that – full speed ahead.



Boundary markers of early wetland units purchased by the Minnesota Conservation Department – a program for wetland acquisition that preceded USFWS prairie wetland efforts by nearly 20 years. Utmost in coordination was essential to mesh needed conservation of all units.



John McKane, former editor of the Conservation Volunteer. We had hiked over much of the beachline prairie chicken habitat and struck a common bond for this interesting region. McKane often requested articles supporting wetland conservation. One special issue titled “Liquid Assets” carried this quotation (5):

“Less than 100 years ago, Minnesota contained at least 20,000 square miles of this native prairie pothole habitat.

“Today, a fragmented remnant of this prairie type remains. Of the 20,000 square miles of the original, less than 15 square miles remain in undisturbed tracts of a square mile or larger. And these are being threatened in the name of progress.”

Perhaps we should heed the sound advice as contained in this old English saying:

“The law locks up both man and woman
Who steals the goose from off the common
But lets the greater felon loose
Who steals the common from the goose.”
– an old English saying (11)

McKane also promoted designation of Rothsay, Minnesota, as the “Prairie Chicken Capitol of Minnesota.” Initially, we started off with a designation of “. . . . Prairie Chicken Capitol of USA” but backed off to include only Minnesota.



An 'island' of native habitat still the 20,000 square miles mentioned in Assets quotation (5), encroaches on lower left.



prairie pothole remaining from the Liquid Fresh drainage



Another 'island' of native prairie pothole habitat in Becker County showing completed drainage up to its boundary.



Onto the prairie scene came a new boundary marker – Waterfowl Production Area – designating a fee title segment of the USFWS program. A new tool for wetland conservation had been added, that being perpetual easements for preservation of larger concentrated blocks of small scattered potholes.



George Gard bolting down one of the first WPA (Waterfowl Production Area) boundary markers.



Minnesota DNR Area Game Manager Gordy Nielsen holds forth with Minnesota DNR Chief

Dave Vesall and Assistant Regional Director Walt Schaefer of the USFWS. Points were brought out for Canadian waterfowl leaders on their tour. From left to right: Canadian, Walt Schaefer, Gordy Nielsen, 2 Canadians and Dave Vesall. (Canadian names not known)

Area Wildlife Biologist Norman J. Ordal, a key figure in the coordination of Minnesota DNR and USFWS prairie wetland conservation efforts in western Minnesota. Ordal was a WWII veteran and a graduate school classmate of mine at the University of Minnesota. His role as a 'peace maker' when conflicts arose was invaluable.





Vernon Gunvalson, as Regional Game Supervisor for all of northwestern Minnesota, was another top-flight coordinator whom I relied on heavily. Our USFWS northern counties were within his working boundary. Vern was another WWII veteran classmate at the University of Minnesota and his total conservation support was essential to keep programs rolling.



Orville Nordsletten, Minnesota DNR Area Game Manager for several of the USFWS northern counties. He was a dedicated conservation 'bulldog,' always enlisting, enticing or badgering support for the wetland resource so valuable and now so scarce, that every effort must be made to preserve what still remains.



Morris L. Patterson, one of a kind that was hard to top for his fiery sense of dedication for conservation of all natural resources. 'Pat' was a woodsman of considerable reputation – one who had just completed 5 years working in the BWCA – summer, fall, winter and spring. Now, this seasoned woodsman was assigned to western Minnesota. His base was to be Hubbel Pond with major management assignments on the Corps of Engineers Orwell Dam project, prairie chicken management areas and Hubbel Pond.

Even though this is 2003, I have to include this story on 'Pat's' indoctrination to the prairie edge. I had titled it 'Hooked':

Morris Patterson was a legendary figure long before he was transferred to Fergus Falls. His five years in the border lake country of northeastern Minnesota had marked him as a strong-willed, able, dedicated conservationist that kept his administrative superiors consistently on edge. But his principled conservation views always pulled him out of the fire. His five plus years in the BWCA, and before that elsewhere in the woods of northeastern Minnesota, marked him first and foremost as a woodsman.

Then one spring-like day 'Pat' popped into Fergus Falls with a brand new assignment on the Minnesota prairie edge. Ducks, geese, swans, and all the rest were on their flights northward. When that happens, the only thing to do is to get closer to the real heart of the migration corridors. A rapid decision. Off to the White Rock area on the Minnesota/South Dakota border.

That afternoon thousands of northward bound swans were moving into these marshes. It seemed as though they all wanted to land – even though they had been riding a strong southeast wind. They had traveled far. Flock after flock turned over the White Rock marshes, headed back into a southeast wind and began their descent – tipping and zig-zagging in helter-skelter fashion to get into those marshes for rest and food. Their drop, this day, was more like ducks dropping on a windy day.

All the while this was happening, nothing escaped Patterson and the grandeur of this spectacular natural event obviously had struck to the heart of his deep appreciation for nature. Deep in the middle of this marsh I could not help but reflect how this event affected this hard-bitten woodsman-conservationist of the northeast. That one event – of swans dropping into the White Rock marshes – came up frequently over the next three decades that I worked with Patterson on the Minnesota prairie edge. He was 'hooked.' He could see clearly there were lots of management possibilities for this prairie type country. He settled in and completed many excellent wildlife management projects that left his mark for the future.



Area Game Manager Robert Farmes worked the extreme northwestern corner of Minnesota, which included large, flat, often impounded wetland projects. His area overlapped into Mahnommen and East Polk Counties. This was another segment of Minnesota that required frequent meetings to tie operations together. Common question – where to meet? Marcoux Corners or the historic Red Apple Café in Mahnommen? Farmes' conservation efforts were duly recognized late in his career with a special award from the Minnesota Chapter of the Wildlife Society.



Genial Minnesota DNR Area Biologist Robert Benson from neighboring Pope County. With Ordal, Benson completed several waterfowl production studies. Resultant information was moved into management phases.



Dave Wiley, former DNR Game Manager, during parts of this era who also served as the RC&D wildlife biologist.

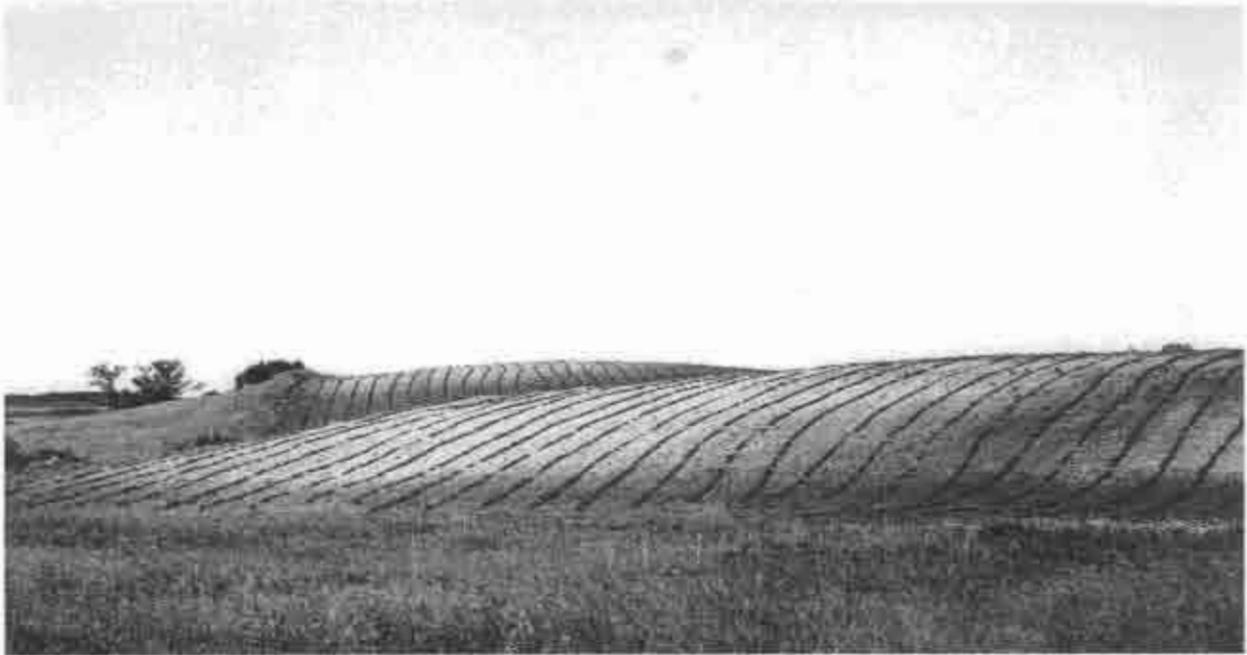
Harold F. Duebbert, waterfowl researcher with excellent well-grounded facts leading to improved management on the land. His sound waterfowl research findings, coupled with those of George Swanson of the Jamestown USFWS Research Center, were constantly used in our Prairie Pothole Region meetings with the public.



Minnesota DNR Area Game Manager Gordy Nielsen, who steadily kept all the wildlife programs moving along in Otter Tail and adjacent counties.

Lou Swenson of the USFWS who, when the projects were 'signed, sealed and delivered' took over the early management of those projects. His shift of assignment to Alaska changed his course of contribution to local resource causes.





What was soon to be a monoculture in the highly erodible rolling terrain of the western Minnesota segment of the Prairie Pothole Region.



Question is – How long before economics alone dictates a use that is within this land's inherent capabilities?



Another scene of the same.



SCS Work Unit Conservationist Frank O. Janzen, who worked with farmers throughout Otter Tail County during this era. He was a not-too-distant relative of Dan Janzen now heading up the USFWS in Washington. Frank was employed by the SCS and tied to their policies but I've often thought that at heart he would have preferred to be associated with conservation policies of the USFWS Prairie Pothole Region program.

Roy Dale Sanders, director, photographer, technician, overall planner for the production of two wetland documentaries – Land of the Prairie Ducks and Swamps, Bogs and Marshes. His films served as excellent educational tools for prairie wetland conservation.

Larry Jahn of the Washington-based Wildlife Management Institute. When we had a critical issue needing outside support, we called on Larry and he would put his well-considered conservation judgements to the problem at hand.





Anders Malm, leader of the Swedish television crew that came to Fergus Falls for filming prairie wetlands and spent all of their allocated time in Otter Tail County. Anders spoke English well and both he and his two crew members visited easily throughout this largely Scandinavian community.

Malm's cheerful photographer – complete with mustache (name not known).



Anders' assistant photographer who kept this Swedish TV crew on course.



Warren H. Nord at an early stage helped to get the USFWS prairie small wetland program underway. He is one of many that served as a competent mentor for me. County by county we had covered all of Minnesota on the ground in our first Upper Midwest wetland inventory. His basic conservation philosophies were woven into my early indoctrination. We completed the Minnesota Wetland Inventory (6). From that inventory the western Minnesota Prairie Pothole Region was outlined. This was where future work was to be concentrated. Warren's transfer to Sacramento, California, changed his line of endeavor.

Ellison 'Bull' Madden in the field. Beneath his laid-back country boy appearance there lay a keen, perceptive mind – one of the sharpest we had in our entire crew. His conservation ethics came through loud and clear within his Devil's Lake, North Dakota, area of operations. Results of his and Bob Billings' work on the land showed clearly when one viewed the mapping of perpetual easements – all within the best Prairie Pothole Region waterfowl production habitat on the U.S. side of the border. That combination of Madden and Billings was a good one to place untold thousands of excellent prairie marshes under permanent protection.

Not to be left out of this picture is my loyal cocker/springer "Pokey" – a faithful and effective companion for many years. Both Madden and "Pokey" will be long remembered.



Robert 'Bob' Panzner was named supervisor of the Benson, Minnesota, office upon its opening. That office was organized when the wetland program was in 'high gear'; the cream of the wetland crop had not as yet been skimmed off. We often shared the question and answer section of our many critical meetings. Bob was good at that and proved to be excellent support. In this photo, 'Bob' on left was talking with Robert Benson, Minnesota DNR waterfowl biologist.



Henry 'Milt' Reeves assumed the supervisory role at Aberdeen, South Dakota – this shift after the untimely death of 'Art' Stone, Aberdeen's first supervisor. Administrative details at one point were starting to get both Reeves and myself 'hemmed in.' Lots of questions were being asked about waterfowl production zones of Canada – Alberta, Saskatchewan and Manitoba. There was no indication that we would ever be permitted to cover prairie-Canada officially. With that, Milt and I decided in June 1964 to take leave and travel on our own into this region. The following report as referenced carried this segment:

"We covered about 3,500 miles in the prairie pothole region of United States and Canada camping in many of the project sites. Early morning hours found us folding our tent and heading for the nearest town for breakfast. We looked over numerous waterfowl production habitats, combining this inspection with an on-site review of past reports for these blocks. Through this process we rapidly gained valuable insights into these widely different habitats. All of these studies were mapped and plotted within the widely ranging precipitation zones of the prairie region.

"Our first-hand look at these Canadian prairie wetland habitats proved to be a mainstay for public meetings, reports, and planning for the next 15 years. From that point on, we did not speak with an incomplete knowledge gap on the Canadian scene but came through with first-hand views. Basic personal philosophies and planning thoughts were shaped as we traveled either through dust or flood."

Closures to this 1964 Canadian report read:

"An enlightened public, it seems, can be tolerant of limited views by "grass-roots" farmers, but should permit little margin for planning errors by technical land and water conservation agencies.

"Practical management implications of these preceding statements are important in all land use planning. Technical wetland planners dare not base their plans only on the wet years, but must allow for the complete gamut of extremes. And it appears that, for most of the prairie pothole region, the dry extremes are the rule." (7)



Pilot-biologist Ross Hanson, after a long, rough flight, stopped at the Fergus Falls Airport. That's when this photo was taken. Ross, after five years as a Navy pilot in WWII, logged about 15,000 hours of flight time with the USFWS under three divisions (Refuges, Law Enforcement and Migratory Bird Management). Much of this flight time had entailed low-level flying on waterfowl inventory ('duck counting') in Saskatchewan and other prairie provinces. Ross was a highly competent biologist along with his flying skills.

Later in his career he moved into an administrative air safety position. I credited Ross with having written the shortest government memo ever written. By mail I asked a question of Ross. By return mail – the shortest memo – “The answer to your question is no. (Signed Ross Hanson)

Ross Hanson was open and generous in sharing his firsthand experiences flying in prairie-Canada and Mexico. His experiences helped us more local workers to get important points out to the public.

After retirement, I struck up a close friendship with Ross – a friendship I deeply valued.

Paul L. Hegdal, recently graduated from Colorado State University, started out his long-term career with the USFWS at Fergus Falls. Hegdal, with Francis Landwehr, did all the leg work on the project. Results were summarized in a report Duck Production Studies of the Minnesota Border-Prairie Zone (8). Purpose of that study: Drought had blanked-out much of the Dakota waterfowl production range. This waterfowl field work was to determine if with that drought there had been a shift into the well-watered semi-wooded border prairie zone.

Paul did a good job on this study, continued with other well-planned international work, and was a credit to the USFWS.





After considerable nudging, the Fergus Falls Office learned of Mann's trail to the Prairie Pothole Region. That trail went like this:

Grady E. Mann headed up the first Fergus Falls U.S. Fish and Wildlife Service wetland preservation office – the first office of about 6 to follow. As he described his career, there had been such a logical chain of events that the stages must have been pre-ordained.

After about 4-1/2 years with the 1st Armored Division during WWII, he came to Minnesota and completed a Master's Degree in Wildlife Management at the University of Minnesota. There he met this young Duluth lady – Lois Landre who in 1948 became his wife.

For 3 summers he worked statewide with the Minnesota DNR on shallow duck lake surveys. After graduating from the University of Minnesota, he started looking for a year-round experience on a major waterfowl area. That experience for 2 years was provided at the Lower Souris National Wildlife Refuge – a refuge whose northern boundary ended on the Canadian border. While there, he learned firsthand the role of large, usually impounded refuge systems. But another question – how about the role for waterfowl production of the thousands of prairie potholes? They were scattered all over much of the Dakota's undulating and rolling country.

Again fate prevailed. It was then off to the Waubay Hills of South Dakota where an important waterfowl production study was into its early stages. In one of the wettest years in recent history (1950) he and Chuck Evans, the waterfowl research leader, 'dogged' out the fine details of prairie duck production – upland cover, distribution of potholes, their 'feather edges,' food supplies, movements and a host of others. As one observer noted – "... You guys know what those ducks are going to do before they know themselves."

Next in this mysterious logical chain of events came the nationwide wetland inventory. From that, an even wider look at waterfowl zones – migration and production – was provided. This inventory in the Upper Midwest entailed firsthand coverage – county by county – in Minnesota (6), Wisconsin (9), Michigan and Iowa (10). Careful inventory details from the Minnesota Wetland Inventory zeroed in on the present-day prairie pothole zone of western Minnesota (6).

Thus far, operations were in the planning and learning stages. Next was to get that basic information tied directly to the long-term preservation of prairie marshes on the land. At this point (1954) the circle had been completed. Fate again directed that he head for Fergus Falls on Tom Schrader's 'exploratory' mission.

Eighteen years later, he retired from the USFWS, then ended up on the staff at the University of Minnesota. After that he was into major statewide wetland policy consulting projects with the Minnesota Division of Planning, also their Division of Waters, and the big one on wetland policies for the Province of Saskatchewan. The rest, he claimed, was history. Scores of competent, young, dedicated people have and are contributing to the preservation and management of prairie marshes. He wishes the best for them.



The beauty of it all. . . .

Prairie wetlands are a unique natural resource that cannot be duplicated. They are a resource



developed under untold ages – so valuable and now so diminished that every effort must be made to preserve what little remains (5).

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