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Résumé de l'article
Entre 1931 et 1954, Frank MacDougall, expert-forestier, directeur du parc Algonquin de 1931 à 1941 et plus tard sous-ministre des Terres et Forêts, et John R. Dymond, zoologiste en poste à la University of Toronto, conçurent en collaboration un cadre pour la recherche scientifique formelle menée dans le parc. La détermination de MacDougall de mettre en œuvre une politique d'aménagement intégré des ressources s'appuyant sur des données de recherche et la passion de Dymond pour la protection de la diversité naturelle, condition indispensable à la recherche écologique, étaient inspirées des derniers développements en Angleterre et aux États-Unis. Leur collaboration a été à l'origine d'une politique plus protectionniste pour le parc Algonquin, incluant la création de pécheries, la mise en place d'installations de recherche sur la faune et les forêts, la création des premières réserves naturelles et l'implantation d'un programme d'interprétation innovateur, toutes choses qui ont eu une incidence marquante sur les politiques élaborées par la suite dans d'autres parcs provinciaux ontariens.
ABSTRACT:
Between 1931 and 1954 Frank MacDougall, forester, superintendent of Algonquin Park (1931–1941) and later Deputy Minister of Lands and Forests, and John R. Dymond, University of Toronto zoologist, together fashioned a framework for formal scientific research in the park. MacDougall's resolve to initiate a multiple use management policy informed by research-based knowledge, and Dymond's passion to protect natural diversity for ecological study, were both shaped by developments in Britain and the United States. Their collaborative efforts resulted in a more protectionist policy for Algonquin including the establishment of fisheries, wildlife and forestry research facilities, the first nature reserves, and an innovative interpretive program — all of which profoundly shaped subsequent policies in other Ontario provincial parks.

RÉSUMÉ
Entre 1931 et 1954, Frank MacDougall, expert-forestier, directeur du parc Algonquin de 1931 à 1941 et plus tard sous-ministre des Terres et Forêts, et John R. Dymond, zoologiste en poste à la University of Toronto, conquirent en collaboration un cadre pour la recherche scientifique formelle menée dans le parc. La détermination de MacDougall de mettre en œuvre une politique d’aménagement intégré des ressources s’appuyant sur des données de recherche et la passion de Dymond pour la protection de la diversité naturelle, condition indispensable à la recherche écologique, étaient inspirées des derniers développements en Angleterre et aux États-Unis. Leur collaboration a été à l’origine d’une politique plus protectionniste pour le parc Algonquin, incluant la création de pêcheries, la mise en place d’installations de recherche sur la faune et les forêts, la création des premières réserves naturelles et l’implantation d’un programme d’interprétation innovateur, toutes choses qui ont eu une incidence marquante sur les politiques élaborées par la suite dans d’autres parcs provinciaux ontariens.
Beginning in 1931, Frank A. MacDougall, the first professional forester to assume the superintendency of Algonquin Park (1931–41), and John Richardson Dymond, a University of Toronto zoologist, struck a working relationship destined to have a profound influence on the history of the park, and by extension on the management of all Ontario provincial parks. Superintendent MacDougall recognized from the outset that administering an area the size of Algonquin with its myriad of natural resource management problems, required a vastly more sophisticated foundation of research-based knowledge than had been available to his predecessors. In this view, he was encouraged by J.R. Dymond who advised the superintendent about recent developments in the field of ecology and natural areas protection in both the United States and Britain. Together, the forester and the zoologist collaborated to secure in the park a formal place for scientific research upon which to base management policies. Their joint efforts eventually resulted in the creation of three important scientific facilities in Algonquin—the Harkness Laboratory of Fisheries Research (1936), the Wildlife Research Station (1944), and the Swan Lake Forest Research Station (1950). The many scientific studies generated by these facilities established Algonquin Park as one of the most important centres in Canada for ecological research. In addition, the MacDougall-Dymond relationship led to the setting aside of the first small nature reserves (1938–9), of the Wilderness Area (1944) for silvicultural and wildlife research, and of the creation of the renowned Algonquin Park naturalist program. Beyond that, as MacDougall fashioned a new multiple use policy for Algonquin during the 1930s, with Dymond providing advice in the background, the protection of natural values received greater prominence in the policy equation.

From 1893 to 1930, Algonquin Park was developed and managed according to utilitarian conservationist attitudes. Government officials viewed timber, fish and wildlife, and recreation in revenue-producing terms. This resulted in the exploitation of timber and fur-bearing animals, creeping commercialization, and the proliferation of cottage leaseholders, lodges, hotels and youth camps. Scientific research on fish and wildlife species and timber resources by park personnel was non-existent prior to 1930. No foresters or biologists received appointments to the Algonquin staff. The only
research in the park had been conducted by a few university professors. Faculty of the University of Toronto's Forestry School, for example, had conducted a field camp at Achray since 1924. Still, in the nearly four decades since the founding of Algonquin, no systematic fish, wildlife or silvicultural research had yet been launched upon which to base park management policies. Consequently, lakes were over-fished, wolf extermination remained the basis of what passed for wildlife management, poachers went about their business with seeming impunity, and forest practices in the park differed little from those on Crown land generally. No one had yet stepped forward to challenge the paramountcy of utilitarian thinking by demanding that scenic values, or natural areas protection, or ecological considerations be given consideration, if not priority, in park policy.

The first organized resistance to the utilitarian paradigm in Algonquin emerged from within the park. In 1929, the Cache Lake Leaseholders Association, some sixty members strong, sprang into action when the McCrae Lumber Company received authorization to log in Canisbay Township. Haunted by the spectre of the approaching woodsmen, the association orchestrated an effective protest in the Toronto press and at Queen's Park which resulted in the establishment of a 100 foot shoreline timber reserve around their lake—the first such reserve in a provincial park. Similarly, the following year, the Ontario Federation of Anglers, representing some fifty local fish and game clubs with a combined membership of 10,000 people, protested the proposed routing of a highway through the park. Construction of the road, the federation argued, would expand tourism to the detriment of fish and game stocks. Startled by the intensity of the opposition, Ontario Lands and Forests Minister William Finlayson dropped the highway project. Under criticism in the legislature and his own caucus about the Algonquin “problem,” Finlayson searched the ranks of his department for a new kind of superintendent; he found his candidate in the person of Frank MacDougall.

Born in Toronto in 1896 and raised in Carleton Place, MacDougall was a student at Queen's University when the First World War broke out. He enlisted in the Canadian Expeditionary Force and served overseas from 1915 to 1919. Upon returning to Canada he entered the University of Toronto Forestry School. After graduation in 1923, he joined the Ontario Department of Lands and Forests (DLF) and rapidly rose to the position of District Forester for the Sault District. MacDougall quickly distinguished him-
self as one of the department's best field administrators. He impressed his superiors by promoting reforestation on a major scale near Thessalon in what became the Kirkwood Forest Management Unit. During these years at the Sault, the home base of the new Ontario Provincial Air Service (est. 1924), MacDougall glimpsed the potential of aircraft in lands and forests work, and subsequently obtained his pilot's licence in 1930. When he accepted the superintendency of Algonquin Park he insisted that he be provided with his own aircraft in order to administer adequately such a vast, roadless area.

MacDougall possessed an extraordinary variety of interests and talents. "He is the 20th century counterpart of the Renaissance man," noted one journalist. MacDougall became adept at whatever he put his mind to, including angling and hunting, carpentry, violin making, photography, gardening and cooking. Blessed with a photographic memory, he also cultivated his scholarly side by reading widely, especially studies in military history, biography and natural resource management. Full of restless energy, incessantly stimulated by new gadgets, ideas and approaches, he was also a methodical and systematic person who believed research and planning to be essential for administrative success—a belief derived in part from his Forestry School training and in part from a personal philosophy shaped by his reading of the past. MacDougall took particular interest in the life of Napoleon Bonaparte, and saw in him the model administrator. Napoleon achieved greatness, MacDougall thought, because he was invariably prepared and had conceptualized plans for most contingencies. This trait became the hallmark of Frank MacDougall's own career.

Within eight months of assuming the superintendency in May 1931, MacDougall had completed the basis of a master plan for Algonquin. Although still essentially shaped by the "gospel of efficiency," his plan was noteworthy insofar as it gave prominence to recreational, scenic and scientific values. Rather than the traditional emphasis on timber extraction, MacDougall called for intensified recreational development, and envisioned his park becoming a four seasons "natural playground for the people" with first-class hotel accommodations including golf and winter sports facilities. Since tourism also required better access than that being provided by Canadian National Railway, MacDougall mapped out a route for a scenic highway across the southern portion of Algonquin and declared that it would "make the Park one of the greatest assets of the Province, from a revenue stand-point."
Superintendent MacDougall's desire to promote revenue-generating tourism development was not surprising given the Depression conditions gripping Ontario. What was less predictable were his plans for scenic and wilderness protection, and scientific research of fish and wildlife—plans which considerably tempered the recreation/tourism imperative. MacDougall was adamant that access roads and cottage and recreational development would be kept out of the park's wilderness interior and restricted to areas contiguous to the railway lines or proposed highway. In short, he proposed a system of zones (regions he called them) of residence and of wilderness.

MacDougall's concept of "wilderness" did not exclude logging; all the same, he recommended that the timber operators be placed under more strict regulation. Existing sawmills should be phased out, and no new mills permitted within park boundaries. Anticipating tensions between loggers and recreationists, particularly if the new highway was constructed, MacDougall determined that when timber licences came up for renewal, clauses would be routinely inserted to establish timber reserves along the highway corridor, and along the shorelines and portages of major canoe routes. "We are advised by ichthyologists," he added, "that trout in the minnow stage require shade, so that this will be most important in the conservation of fish as well as in the fire protection and scenic beauty of the Park."¹¹

MacDougall also signalled a shift in policy toward managing the natural resources of Algonquin on a more scientific basis. He was the first superintendent to understand that sound fish and game management policies required a foundation of scientific research, beginning with creel census and game survey programs, followed by the assessment of environmental factors affecting the productivity of species in specific areas. Since Algonquin's renowned angling generated considerable tourism revenues, MacDougall targeted fish management as his top research priority. By October 1931 he had made arrangements with the Ontario Department of Game and Fisheries to assign scientists to three different watersheds in Algonquin Park the following year to conduct research on fish propagation.¹² Already, in the fall of 1931, the Department of Game and Fisheries had provided MacDougall with 66,000 fingerlings for eight over-fished lakes. Moreover, he had taken dramatic action to conserve fish stocks by prohibiting winter fishing for the first time beginning on October 15, 1931. Plans for an annual creel census were also in place for 1932.
Compared to his fish management efforts, MacDougall's plans for game management were little more than good intentions at this juncture. Without any biologists on park staff, the superintendent could only pursue traditional themes of wildlife management—clamping down on winter poaching by the use of aircraft, and pursuing the longstanding policy of wolf extermination. Lack of professional forestry personnel and a severely curtailed budget also posed obstacles to developing silvicultural research and forest management policies. In this area, however, MacDougall turned to the University of Toronto Forestry School's annual field camp at Achray. At the superintendent's urging, the faculty at the camp agreed to assign their students the task of preparing a silvicultural research plan as part of the curriculum.

Such, then, were the main features of Frank MacDougall's initial plan for Algonquin Park. It would shape his decisions for the remainder of his superintendency and beyond. Significantly, his vision for the park did not remain static. Open to new ideas and influences, MacDougall actually modified his utilitarian paradigm by adding a "preservationist" element to his plan. By 1934 he had substantially revised his thinking. "The Park should be for the enjoyment of the people with revenue a secondary consideration," he now wrote. When considering any policy changes, he added, "it would seem wise to give consideration to the viewpoint of the National Parks of the United States." He cited a long list of principles based on American National Parks policy including: "timber should not be considered from a commercial standpoint;" "forestry should be scenic rather than commercial;" "no private ownership or land leasing;" "education should be the major phase of enjoyment." MacDougall realized that "all these principles cannot, perhaps, be applied to Algonquin Park," yet there are many that would "keep the Park from being side-tracked from its main purpose."  

Influences closer to home had also shaped the superintendent's thinking. The work of both the Federation of Ontario Anglers and the recently established Federation of Ontario Naturalists had caught his attention, and he resolved that both groups would be consulted on all future park policy decisions. MacDougall had been especially influenced by the FON publication entitled Sanctuaries and the Preservation of Wildlife in Ontario (1934). This pamphlet proposed that nature sanctuaries be set aside in the park to function as ecological benchmarks. By adopting a nature reserve/sanctuary policy for Algonquin Park, MacDougall had significantly...
revised the utilitarian conservationist approach he had learned during his forestry school training.

II

The evolution in Frank MacDougall's thinking about natural areas protection and management between 1931 and 1934 was shaped largely by J.R. Dymond and his associates. When government-wide austerity forced the cancellation of the fish studies planned for 1932, MacDougall perforce looked outside the public service for assistance. He found it in the person of University of Toronto zoologist, J.R. Dymond. Like MacDougall, he had strong convictions about the need for scientific research, and a personal reverence for Algonquin's natural values. It was Dymond who introduced the superintendent to the park management implications of the emerging discipline of ecology, and who put MacDougall in touch with university faculty eager to conduct the long-term field studies which he urgently desired.

J.R. Dymond was born in 1887, and raised on a farm in Metcalfe Township, Middlesex County, Ontario. After graduating from high school in Strathroy, he studied natural science at Toronto's Victoria College (1908–1912) before joining the federal Department of Agriculture in Ottawa. While here, he came under the influence of the Ottawa Field-Naturalists' Club (est. 1879) whose members encouraged Dymond's passion for natural history and nature interpretation. Driven by a willingness to seek more demanding work, he left the civil service and returned to the University of Toronto where he obtained his Master's degree in biology in 1920.

Graduate studies kindled in Dymond an interest in ichthyology, the branch of zoology which examines fish. During the 1920s, scientists in that field were engaged in basic "stock-taking"—gathering information on the taxonomy and distribution of fish species. Dymond conducted field studies at various lakes across the province, including some in Algonquin Park. He was part of a small community of university scientists and graduate students known as the Ontario Fisheries Research Laboratory (OFRL). A vehicle for co-ordinating research and sharing findings through informal discussion and publications, the OFRL had two goals: to contribute to a "better understanding of lakes as 'complete physical-biological complexes'", and to provide "a scientific basis for economically sound fisheries regulation and management." For Dymond, the
OFRL experience taught him that both ecology and utility could be served simultaneously. On this question, there was an instant meeting of the minds between Dymond, the zoologist, and MacDougall, the forester.

Dymond found MacDougall to be an eager "student" of the fascinating developments in the science of ecology. Dymond would have probably tutored his protégé on Charles Elton's *Animal Ecology* (1927), a book that employed concepts like "the food chain", the "pyramid of numbers", and "the niche" as intellectual tools for the study of "natural communities" and their "component populations". Indeed, Dymond was so impressed with Elton's work that he arranged to visit the ecologist at Oxford in August 1929, and subsequently invited Elton to pay a visit to Algonquin and the University of Toronto. In addition, MacDougall's professional curiosity would have likely prompted discussion with Dymond about Aldo Leopold's *Game Management* (1933), already a highly regarded textbook on the subject. Leopold's work, like MacDougall's, aimed at the sustained yield of game stocks by the manipulation of habitat.

Dymond and MacDougall were both interested in American national park policy which historically had been more preservationist than its Canadian counterpart. Dymond pointed out the modest but expanding role being played by wildlife scientists within the United States National Parks Service where the creation of a new Wildlife Division in 1933 had signalled growing support both for ecological research and for the preservation of all animal species within parklands. A similar shift in emphasis was occurring more slowly within the Canadian National Parks service. This emerging ecological perspective led parks officials on both sides of the border to reject their old policy of exterminating predators. Frank MacDougall himself eventually adopted this approach in Algonquin Park.

Of all the themes which Dymond discussed with MacDougall, the most recurrent was the international movement to establish nature reserves as ecological benchmarks. Dymond's own advocacy was influenced both by the British County National Trusts and the Society for the Promotion of Nature Reserves (est. 1912), and by the Ecological Society of America (est. 1917). In 1931, he brought his enthusiasm for nature reserves into a new organization destined to shape provincial park policy. Kindred spirits associated with the University of Toronto, the Brodie Club (originally the Toronto Naturalists' Club, est. 1921), the Royal Ontario Museum of Zool-
ogy, and seven independent naturalist clubs from urban southern Ontario, came together to establish the Federation of Ontario Naturalists (FON) in May 1931—just as Frank MacDougall was settling into his new position in Algonquin Park. The FON set out to be a united voice for “the study and preservation of all forms of nature”. Formal establishment of the federation gave Dymond a public platform to disseminate his ecological perspective, and increased political clout in the eyes of the superintendent who was busily conceiving his plans for Algonquin Park.

III

In 1934, Frank MacDougall’s first priority was to encourage fisheries research. Ideally, he wanted a comprehensive fish management policy based on systematic studies in all sections of the park. When his arrangements with the Department of Game and Fisheries foundered on the rocks of financial constraint, MacDougall turned to J.R. Dymond for advice. Initially, the scientist recommended some preliminary conservation measures which MacDougall carried out with the approval of Game and Fisheries biologists. To gather information on fishing conditions in the park, he circulated creel census questionnaires to anglers. By 1935, he had begun a systematic restocking program to enhance the recreational resources of the park. Costello and Brewer lakes were cleaned out, closed to the public, and stocked with brown and rainbow trout—an example of ecosystem manipulation which many modern day scientists would condemn. To initiate long-term fish studies, MacDougall seized upon Dymond’s suggestion that the Ontario Fisheries Research Laboratory could locate a permanent research base in the park. In 1935, the superintendent invited William J.K. Harkness—in the early 1920s a master’s student under Dymond’s firm direction, but by now a colleague and associate professor of limnology in the University of Toronto’s Zoology Department—to make Algonquin the centre for field work by the OFRL. That summer, a temporary field station was set up on Cache Lake where five university biologists worked under the direction of Dymond and Dr. F.B. Ide. The following year, Harkness co-ordinated joint efforts by the DLF, the Department of Game and Fisheries, and the University of Toronto, to construct a permanent home for the OFRL at the south end of Lake Opeongo. This marked the formal establishment of the “fish lab”, as it was commonly known, later renamed the Harkness Laboratory of Fisheries Research.
The laboratory became a leader in Canada for fisheries research, giving rise to hundreds of scientific papers and providing field experience for dozens of scientists. Studies were soon launched to examine the physical and chemical characteristics of the lakes—which limit the size and annual production of fish—and long-term studies on “the depth distribution, movements, food habits, growth rates, and reproduction of Lake Trout, Brook Trout, and Smallmouth bass.” These efforts helped Dymond, MacDougall, and others to fashion management strategies for the park. In the early years, such measures included stocking lakes and streams with Brook trout fry and fingerlings, transferring lake trout to heavily fished waters, closing certain lakes in alternate years, and introducing perch and lake herring where the food supply was inadequate. Under Harkness’s direction, fisheries research later expanded to other park lakes and streams. Moreover, studies conducted at the laboratory had an impact far beyond the boundaries of Algonquin. In 1944 and 1945, for example, Harkness established similar research programs in Quetico, Sibley, and Lake Superior provincial parks.

Dymond not only played a pivotal role creating and sustaining the fish lab, he also advanced wildlife research by encouraging his graduate students to conduct their research in Algonquin. In 1934, Frank MacDougall reported in his park News Letter that C.H.D. “Doug” Clarke, a “Forester Biologist” and one of Dymond’s students, was studying ruffed grouse—Ontario’s most popular and valuable game bird—at Brule Lake. “The initiation of this work marks, we hope, the start of a program of scientific study of the many problems of wild life.” As it happened, Clarke’s seminal research led to the discovery of a malarial blood parasite, *Leucytozoon bonasae*—one of many factors in the fluctuation of grouse populations. Another of Dymond’s graduate students, Duncan MacLulich, investigated the population dynamics of snowshoe (varying) hares. In 1938, MacDougall hired him as “senior ranger” to do “biological investigations on which to base wildlife management procedures ... while still attending to ranger duties.” MacLulich’s work included “population studies on deer, beaver and small mammals, and a survey of the parasites of trout.”

Despite these early initiatives, MacDougall failed to realize his goals in wildlife management. Repeated calls for a full-time park forester-biologist fell on deaf ears within the DLF. An alternative proposal for a jointly funded cross-appointment with the Royal Ontario Museum of Zoology—where Dymond had been director—
since 1934—also came to naught. Apart from the work of Dymond’s graduate students like Clarke and MacLulich, few other advances were made in wildlife research during MacDougall’s tenure. Without sufficient basic information on wildlife population dynamics, scientific management in this area was impossible.\textsuperscript{36}

Not surprisingly, then, wildlife conservation efforts continued to focus largely on the traditional problems of law enforcement and wolf control. MacDougall employed dog teams, air patrols, and tighter supervision to eliminate winter poaching. Illegal trapping during the spring and autumn proved more difficult to control. Nevertheless, by the time he left Algonquin in 1941, the superintendent had reduced poaching to minor proportions through effective enforcement of regulations, and aided by the subsiding economic depression.\textsuperscript{37} MacDougall also took a new approach to the so-called wolf problem. After learning from J.R. Dymond that wolves played an important role in park ecology and that extermination was virtually impossible in so large an area, MacDougall abandoned the policy of extermination and settled for one of wolf control.\textsuperscript{38}

IV

In 1933, the worst tourist season of the thirties, the Canadian National Railway closed the once renowned Highland Inn, and announced the abandonment of the southern rail line through Algonquin. Suddenly, the leaseholders, including J.R. Dymond, who had once stood in the forefront of the anti-road forces along with the Ontario Federation of Anglers, were seized by self-interest and reversed their opposition to the road. Construction of Highway 60 began that fall. Interestingly, the Federation of Anglers maintained its opposition to the highway and continued to argue that it threatened Algonquin’s role as a fish and wildlife sanctuary.\textsuperscript{39}

As the Federation of Anglers predicted, Highway 60 transformed Algonquin Park into a recreation mecca. By 1935, MacDougall himself reported that autotourism had already “changed the character of the park.”\textsuperscript{40} Where previously Algonquin had attracted a relatively few affluent tourists for extended visits to a cottage, lodge or children’s camp, the new wave of autotourists were mainly middle class motorists who came for day trips to view the scenery and wildlife, overnight camping, or canoe trips into the interior.
While MacDougall had enthusiastically promoted road access and tourism, he harbored no illusions about the serious problems the highway posed—user conflicts, congestion, and scenic degradation to name a few. His response was to stick to the principles laid down in his planning documents. Accordingly, he kept the interior lakes free of leaseholders and development, established a scenic timber reserve along the highway corridor, and located the first large campground at Lake of Two Rivers well away from the leasehold lakes.

Anticipating that a clash between loggers and recreationists was likely unless steps were taken to separate them, MacDougall began to amend timber licences in 1934 to create scenic reserves along canoe routes and portages. By 1938 shorelines reserves were in place along some 39 lakes and their connecting rivers and portages. As it happened, just as tourism growth exploded with the completion of Highway 60, the forest products industry emerged from the economic doldrums. Compared to the one company at work in the park in 1933, by 1935 fourteen licence holders, employing some 1,500 men, were again active in the bush. Predictably, more and more wilderness trippers encountered unrestricted bush operations. In 1938 the battle over logging was joined. Recreationists and naturalists protested that the loggers were cutting pine in "a wanton fashion" and stripping the trees to the river banks. As the complaints mounted, influential voices began to call for a logging ban in the park. At the forefront of this discussion was J.R. Dymond and the FON who claimed that Algonquin "was being ruined for all time by present lumbering activities."

Frank MacDougall shared the frustration expressed by Dymond and others, and admitted that "logging operations in the park" were conducted as "short term exploitation projects" rather than "perpetual forestry projects." The superintendent himself was exasperated at the operators who frequently logged inside the shoreline timber reserves. Still, MacDougall believed there were compelling reasons why logging could not be banned in the park. "To satisfy all the demands of recreation," he wrote, "would be at the expense of the logging industry, who...purchased the timber in good faith and who have built up...an economic background in mills, towns and employees that cannot be slaughtered in any sudden manner." On this issue, even J.R. Dymond could not budge the superintendent.
All the same, the battle over logging in Algonquin gave Frank MacDougall an opportunity to advance the policies he had been proposing for years. From his study of multiple use theory, he believed that logging, recreation and preservation policies could be harmonized in an area the size of Algonquin Park. "Multiple land use is a new desire for conservationists," he explained. "Algonquin Park ... is one of the few areas in North America where land is being so used. The solution of the problems here will be of benefit to the rest of Ontario." MacDougall announced that scenic preservation would henceforth get priority over timber extraction as the first principle of multiple use in Algonquin. This was codified in June 1939 when all timber operators were informed of a new standard shoreline protection policy. Park regulations now decreed that no timber could be cut "within three hundred feet of any lake or highway or within one hundred and fifty feet of any river or portage," and any trespass into a reserved area would result in a minimum fine of five times the value of the timber extracted.

Beyond scenic protection, the superintendent also announced his intention to create "within the Park boundaries...wilderness areas where no logging will ever be carried on," and to enlarge these areas as "recreation assumes a greater importance than logging." He also intended to advance the FON's sanctuary idea. He began that process in a small way in 1938 and 1939 by setting aside several small stands of old-growth pine as nature reserves—the first in any provincial park.

V

In May 1941, Frank MacDougall was promoted to Deputy Minister of Lands and Forests. Located in Toronto, a short distance from J.R. Dymond's office, MacDougall continued to work with the scientist to shape a more protectionist park policy. After his promotion, MacDougall was soon able to respond to Dymond's badgering about the need for a substantial nature reserve in the park as an outdoor laboratory for wildlife research. On 27 June 1944, the provincial government set aside thirty square miles of Algonquin Park in Canisbay and McLaughlin townships as a "wilderness area" for wildlife and silvicultural studies. The order-in-council specified that "the entire land-animal and bird population is to be undisturbed excepting for the continuation of the control of wolves and game control." Although these exceptions violated the FON's sanctuary concept, Dymond was satisfied for the moment.
derness area” would be closed to fishing, logging, mining, cottages, resorts and public travel. Formal establishment of this new reserve allowed for an expansion of the MacDougall-Dymond research agenda set out in the 1930s, and provided an ideal opportunity to set up what became known as the Wildlife Research Station. Like the Harkness “fish lab,” the station attracted an international following. Studies conducted there—on subjects ranging from parasitology to the behaviour of birds and the interrelationships between large mammals—would generate an impressive record of publications in the decades ahead.54

MacDougall wrapped up another piece of unfinished business when he set aside what he believed was a long overdue reserve in Algonquin, to be used exclusively for silvicultural research. In 1950, he established the Swan Lake Forest Research Station—the third research facility in Algonquin—on the park's west side, located on a 2800 acre reserve.55 The initial research undertaken at the station focused on yellow birch regeneration, improving the quality of sugar maple, red spruce provenance tests, and prescribed burning.

The lack of published material describing Algonquin Park's human history, natural features, facilities and canoe routes, had been one of MacDougall’s annual complaints during his tenure as superintendent. As deputy minister, he made funds available for the first time to publish an information booklet on the park and a canoe route map. He also arranged in 1944 for the DLF to reprint Duncan MacLulich's monograph, Birds of Algonquin Provincial Park, Ontario (first published by the Royal Ontario Museum in 1938). That same year, acting on the advice of a committee of University of Toronto historians chaired by none other than J.R. Dymond, MacDougall hired Audrey Saunders to write a park history. The result was the popular Algonquin Story (1946)—a pioneering work in Canadian oral history which is still in print.56

MacDougall also addressed the need for interpretive services to educate park visitors about Algonquin's natural values. In 1942, J.R. Dymond had begun to conduct weekly, informal nature hikes for cottagers and their guests. Impressed by this initiative, MacDougall sent Dymond to study the interpretive program at Bear Mountain Park in New York State.57 During the summer of 1944, the scientist put this knowledge to work in Algonquin: he laid out a self-guiding, labelled nature trail, conducted nature tours, and lectured at the children’s camps. Encouraged by the enthusiastic response of park visitors, Dymond proposed an expansion of the program.
Again, MacDougall provided the necessary resources. By the 1950s, Algonquin Park provided a model naturalist program, featuring a new museum and visitor centre (opened in 1953), four labelled nature trails, conducted trips, evening slide shows and lectures, and special events for the children’s camps. By every measure it was the premier park interpretive program in Canada, and one of the outstanding products of the MacDougall-Dymond partnership.\textsuperscript{58}

Frank MacDougall and J.R. Dymond combined yet one more time to secure the policies they had proposed since the 1930s. The balance struck in the 1930s between recreation and protection was upset after World War II by unprecedented outdoor recreation pressures. In Algonquin, the situation quickly approached a crisis. Beginning in 1947, J.R. Dymond repeatedly warned MacDougall that, in his view, recreational use clearly outweighed nature protection in park management.\textsuperscript{59} He pointed to the crowded and deteriorating campsites, the overtaxed sewage and drinking water systems, the soaring numbers of cottage leaseholders, and the hundreds of floatplanes carrying fly-in anglers to interior lakes where outfitters cached boats and equipment.\textsuperscript{60} Confronted with a barrage of complaints about the park, Frank MacDougall personally conducted an investigation. He concluded, sadly, that “we now seem to be in a period of deterioration and forthright steps will have to be taken”.\textsuperscript{61}

In the spring of 1954, alerted by MacDougall that a new, more protective park policy was imminent, Dymond helped to lay the publicity groundwork in \textit{Maclean’s Magazine}. “The sudden growth of Algonquin Park’s tourist traffic,” he explained, “is proving that Canada’s view of the forest is changing....We are beginning to see that the forests of Canada molded our history and our character.” With the decline of “our finest stands of forest,” places like “Algonquin that still remain relatively uncluttered by civilization’s trappings have acquired a new value that dollars and board feet cannot express. They are living museums that show the face of Canada as it once was; they are acquiring a historical, cultural and recreational value far greater than their timber value.” Canadians “are beginning to recognize those deeper values, that forest preserved for its own sake in a condition as close as possible to its original wilderness state will be used, appreciated and understood.”\textsuperscript{62} Two weeks later, on 17 June 1954, the Ontario Cabinet approved a new policy to restore Algonquin Park to a more natural state.\textsuperscript{63} No new leases would be granted for private, public or commercial purposes, in line with FON suggestions. The leaseholders in the park were to
be phased out over the next forty years, after one more renewal of their twenty-one-year leases.

The "back to nature" policy of 1954 reflected the vision of Algonquin Park developed between 1931 and 1934 by Frank MacDougall and J.R. Dymond. Most aspects of their plans for the park had been realized. The wilderness interior of Algonquin had been kept free of leaseholders. Tourist development had been restricted to the Highway 60 corridor. Scientific research had been permanently entrenched in the park at the Harkness Laboratory of Fisheries Research, the Wildlife Research Station and the Swan Lake Forest Research Station and reserve. The studies conducted at these facilities now informed fish, wildlife and silvicultural management policies. The first nature reserves and a wilderness research area had been set aside. Algonquin Park boasted the best naturalist program in any provincial or national park in Canada. Finally, MacDougall's multiple use park policy articulated in the late thirties had been modified to accommodate Dymond's protectionist ideas. Initially, in the wake of the logging controversy of 1938, the superintendent had given precedence to scenic and recreational values in park policy over commercial logging. Later, as deputy minister, in the face of the unprecedented outdoor recreational pressures of the early fifties, MacDougall gave additional priority to the protection of Algonquin's natural values and launched the "back to nature" initiative aimed at removing all leaseholders from the park. In all of this, the influence of the University of Toronto zoologist, J.R. Dymond, had loomed large.

NOTES

1 An earlier version of this paper was presented at the "Themes and Issues in North American Environmental History" Conference, University of Toronto, 26 April 1998. We wish to thank the conference organizer, Prof. Laurel Sefton MacDowell, and the editor of this journal, for their support and encouragement, as well as two anonymous reviewers who provided insightful comments.

2 It might be thought that our biographical approach smacks of the "great men" school of historical writing. The fact is that two individuals, Frank MacDougall and J.R. Dymond, dominated the shaping of management policy in Algonquin Park during the 1930s and 1940s. The historical context we present here explains why and how these two individuals exercised such an influence. We also recognize that their initiatives were neither complete nor triumphant. All the same, Algonquin Park management was on a more scientific basis at the end of the period than it was at the beginning.

4 Land Records Branch (hereafter LR), Whitney Block, Queen's Park, Toronto, file 79218, Sept.-Oct. 1929.

5 Algonquin Park Museum (hereafter APM; files now at the Algonquin Park Visitor Centre), Historical Files, press clipping, *Toronto Evening Telegram*, 22 Sept. 1933.


15 Financial exigency also led the University of Toronto to terminate its field camp at Achray in 1935 before the students had completed a silvicultural plan for the park.


Stephen Bocking, *Ecologists and Environmental Politics: A History of Contemporary Ecology* (New Haven and London: Yale University Press, 1997), 153. See also Dymond, "A History of Ichthyology in Canada," 10. This dual justification won the group financial support both from the Department of Zoology at the University of Toronto, and the provincial Department of Game and Fisheries.

Several archival collections document the exchange of ideas on ecological research between Dymond and MacDougall. See, for example, Royal Ontario Museum Archives (Toronto), ROM of Zoology Records, RG 59, Box H2, file [#30].


27 PAO, MU 1783, MacDougall Papers, Annual Report for Algonquin Park for year ended 31 October 1932; PAO, RG-1, IA-7, box 39, file 27–1501–17, F.A. MacDougall, “Speech to Toronto Anglers Association” (1935). The stocking of rainbow and brown trout was technically not “restocking”; one species was an exotic from Britain while the other was an exotic from British Columbia. For recent statements critical of stocking practices in the past, see Dan Strickland, Fishing in Algonquin Provincial

28 PAO, MU 1783, MacDougall Papers, Annual Report for Algonquin Park for year ended 31 March 1936; LR-129915, vol. 1, Harkness to R.N. Johnson, Chief, Division of Research, DLF, 15 Feb. 1946; UTA, Fred J. Fry Collection, B88-0027, box 1, file WJK Correspondence, M 1934–37, F.A. MacDougall to W.J.K. Harkness, 21 July 1935; UTA, Department of Zoology Records, A74–0022, box 5, file M3, General Correspondence, Harkness to MacDougall, 9 Oct. 1935 and 16 March 1936; and UTA, W.J.K. Harkness Papers, B79–0034, box 1, Correspondence file 1936–7, Harkness to Hon. H.C. Nixon, Minister., Department of Game and Fisheries, Toronto, 10 July 1936. See also N.V. Martin, The Harkness Laboratory of Fisheries Research (Ontario DLF, 1968). For Dymond’s early initiative, which predates Harkness’s crucial administrative work in setting up the laboratory, see UTA, Department of Zoology Records, A74–0022, box 5, file M3, General Correspondence, Dymond to F.A. MacDougall, 20 Sept. 1934; ibid., MacDougall to W.J.K. Harkness, 10 Dec. 1934; and ibid., file D2, General Correspondence, Harkness to Mr. Henry Davis, Sec., the American Wild Life Institute, 18 July 1936. Dymond’s almost paternalistic relationship with Harkness is evident from ibid., box 2, file D1, General Correspondence, J.R. Dymond to W.J.K. Harkness, n.d., ca. 1922–23. For more on Harkness, see J.R. Dymond, (éd.), Fish and Wildlife: A Memorial to W.J.K. Harkness (Toronto: Longmans, 1964).

29 Strickland, Fishing in Algonquin Provincial Park, 3.

30 APM, Algonquin Park News Letter vol. 13, no. 2, 1 April 1944. MacDougall, Dymond, and Harkness shared the view that Algonquin science needed to be developed as a basis for management policies in the park. Subsequent fisheries research was partly driven by problems outside the park. In December 1936, Harkness wrote to MacDougall: “As part of park service our objective is, first and foremost to maintain or improve the available supply of game fish by proper scientific management; second, use the park as an experimental area and a base from which to develop management of game and fur-bearing mammals and game birds; and third, to establish an educational programme and park museum for the benefit of university students and park visitors.” UTA, Department of Zoology Records, A74–0022, box 5, file M3, General Correspondence, 12 Dec. 1936.


32 Because of his considerable administrative experience and positions of influence, Dymond was able to secure funding for many different projects conducted in the park. He was a member (1938–58) and then vice-chairman (1947–53) of the Fisheries Research Board of Canada. In 1947 he became chairman of an Advisory Committee on Fisheries and Wildlife Research, and later of the Ontario Research Foundation (1954–64). Through these offices, Dymond’s personal support was crucial in

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getting fisheries work started in Algonquin. For Ontario fisheries research in a wider context, see Bocking, Ecologists and Environmental Politics, 155–178, and “Fishing the Inland Seas: Great Lakes Research, Fisheries Management, and Environmental Policy in Ontario,” Environmental History 2 No. 1 (Jan. 1997): 52–73.

33 APM, Algonquin Park News Letter 3, no. 3 (July 1934).
40 MacDougall Papers, Annual Report for Algonquin Provincial Park for the year ended March 31, 1936.
42 MacDougall Papers, Annual Reports for Algonquin Provincial Park for Years Ended Oct. 31, 1933 and March 31st 1935.
43 MacDougall Papers, file (Superintendent’s correspondence 1936–40), G.H. Lash to Cecilia Hewson, 23 June 1938.
44 LR 79218, Press clipping, Toronto Globe and Mail, 3 Nov. 1938. See also UTA, A.F. Coventry Papers, B73–0008, FON box, FON Circular no. 18 (Oct. 1938), and no. 19 (Dec. 1938).
45 LR 79218, MacDougall to W.C. Cain, 26 July 1938.
47 PAO, MU 1784, MacDougall Papers, file (planning 1932–38), MacDougall to Cain, 23 Nov. 1938.
48 Allin, The Politics of Wilderness Preservation, 68.
49 LR 119915, Algonquin Park News Letter, 8, no. 3, 20 April 1939.
51 LR 79218, MacDougall to Cain, 26 July 1938.
52 APM, Box L2, Oral History Interviews, transcript of interview with Dr. Duncan MacLulich by Ronald Pittaway, 23 Nov. 1976, 25–6; UTA, A.F. Coventry Papers, B73-0008, FON box, FON Circular 18 (Oct. 1938), 19 (Dec. 1938), 21 (Nov. 1939), 22 (April 1940), and 23 (Sept. 1940).


54 APM, reprint # 3693, R. O. Standfield and C.D. Fowle, “The Wildlife Research Station, 1945–1954,” unpublished manuscript, Wildlife Section, Division of Research, Ontario DLF, June 1954. Operation of the facility was the responsibility of the Wildlife Section of the DLF's Division of Research. From 1945 to 1949, the research program was funded entirely from the budget of this Division. Throughout the early fifties these funds were augmented by annual grants from the Research Council of Ontario. The station was directed by Dr. C.H.D. Clarke until 1947 when he was succeeded by Dr. C. David Fowle (1947–1950) — another graduate student of J.R. Dymond's.


56 APM, Historical File, Audrey Saunders's notes on writing Algonquin Story, dated 9 March 1948.


BIOGRAPHICAL NOTES

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Ontario Provincial Parks, 1954
Location of Highway and Early Reserves
Algonquin Park
Harkness Laboratory of Fisheries Research (1936)
Wilderness Area (1944)
Wildlife Research Station
Swan Lake Forest Research Station and Reserve (1950)
Park Museum at Found Lake (1953)

Research Reserves – Algonquin Park

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