

## 1: The amazing world of James Hector / edited by Simon Nathan and Mary Varnham - Details - Trove

*The British North American Exploring Expedition, commonly called the Palliser expedition, explored and surveyed the open prairies and rugged wilderness of western Canada from to The expedition was led by John Palliser, and accompanied by a party of four other men: James Hector, Eugène Bourgeois, Thomas Blakiston and John W. Sullivan.*

He joined University of Edinburgh as a medical student and received his medical degree in at the age of Palliser expedition Shortly after receiving his medical degree, upon the recommendation of Sir Roderick Murchison " director-general of the British Geological Survey " Hector was appointed geologist on the Palliser Expedition under the command of John Palliser. The goal of the Palliser expedition to British North America now Canada was to explore new railway routes for the Canadian Pacific Railway and to collect new species of plants. As it was being pulled from the water, his own horse strayed and, when chasing after it, Hector records, he was kicked in the chest and knocked unconscious. He wrote in his diary of the expedition: His companions, thinking him dead, dug a grave for him and prepared to put him in. His premature burial was cancelled when he regained consciousness. The doctor was knocked unconscious. We all leapt from our horses and rushed up to him, but all our attempts to help him recover his senses were of no avail. We then carried him to the shade of some big evergreens while we pitched camp. We were now in serious trouble, and unless Nimrod fetched in game our situation looked hopeless. One man stayed and watched the unconscious doctor. The rest of us took turns trying to catch trout that we could see in the clear mountain water of the river. Hector must have been unconscious for at least two hours when Sutherland yelled for us to come up; he was now conscious but in great pain. He asked for his kit and directed me to prepare some medicine that would ease the pain. I had him sign a document stating the facts of the accident in case his illness might prove serious. He readily agreed that it would be the proper thing to do. In April he arrived in Dunedin in New Zealand to conduct a three-year geological survey of Otago , soon after the discovery of gold there. He also assembled a staff of half a dozen men to assist with such tasks as fossil collecting, chemical analysis, and botanical and zoological taxonomy. Some of these men, such as William Skey mineral analyst , Richard Gore clerk , and John Buchanan botanical artist and draftsman , stayed with him for many years. As the chief Government-employed scientist, Hector gave politicians advice on questions as diverse as exporting wool to Japan and improving fibre production from New Zealand flax. His political influence was underlined by his marriage in to Maria Georgiana Monro, daughter of the speaker of the House of Representatives , David Monro. He controlled virtually every aspect of state-funded science. He had close and, at times, tense relationships with other men of science, in particular Julius von Haast. Retirement Hector retired in , after four decades at the centre of organised science in New Zealand. She was the daughter of politician David Monro , who was at the time the Speaker of the House of Representatives. The Hector Memorial Medal awarded annually by the Royal Society of New Zealand for outstanding work in chemical, physical or mathematical and information sciences to a researcher in New Zealand. A portrait of Hector hangs just inside the door.

## 2: Palliser Expedition

*The Palliser River is a tributary of the Kootenay River in the Canadian province of British Columbia. It is part of the Columbia River basin, as the Kootenay River is a tributary of the Columbia River. The Palliser River is named in honor of John Palliser, whose Palliser Expedition explored the Canadian Rockies from to*

This American expansionism also drove Canadian expansionist due to the fear that the United States would look north and lay claim to the land before they could. With this said, it became apparent that no sources existed that had a full and reliable assessment of the land. While the HBC had a working knowledge of the land inasmuch as it was useful to their end and business interests, it was insufficient to the needs of the Canadian government. In addition, the HBC was hesitant to share information about the land they controlled for the sake of protecting their monopoly in the region. All the above drove the United Kingdom and the Dominion of Canada to organize the Palliser and Hind expeditions, respectively, [4] especially since the discovery in the s that latitude alone did not determine climate , which in turn suggested that good farmland may exist in the region. In exploring "the Rocky Mountains, for the purpose of ascertaining the most southerly pass across to the Pacific, within the British Territory" since the well-known Athabasca Portage was too far north and "totally useless" for horses; 3. In reporting on "the natural features and general capabilities of the country" and mapping it. They both argued against settling within the arid body of the Triangle. This changed perceptions of the region: It turns out that Palliser saw the region in a state of drought during which ample buffalo herds were grazing the grass shorter. He also bore witness to a number of grass fires, all of which gave the impression of an inhospitable desert. Macoun, on the other hand, found the region in a major wet period after a severe decline in animal life in no small part due to the overhunting of bison. Were it not for this fact, it is very likely that cities such as Calgary , Brandon and Regina would not exist as they do today. Furthermore, the influx of agricultural technology on larger farms that came with the wartime boon such as tractors , combines and trucks all cut labour requirements on larger farms and increased the capital needed to establish oneself as a farmer, further hampering smaller farms. The loss of employment opportunities was further compounded in the s as the government completed rail and road projects, in addition to the cutting of government work budgets. This was caused, in large part, by a decrease in precipitation as well as longstanding flawed farming practices that exacerbated aeolian soil erosion and dust storm activity. This includes the practice of leaving fields fallow, seen as necessary at the time to support agriculture in the given climate, as it was believed that exposed soil would better absorb and retain moisture. Measures undertaken in Alberta and Saskatchewan have since alleviated many of these issues. The Alberta government had the Special Areas Board buy up as much drought-afflicted farmland as possible to convert to grazing land, 2. Both provincial governments subsidized the relocation of farmers willing to leave their farms in the drought-stricken regions, and the federal government established the Prairie Farm Rehabilitation Administration in , an organization that expanded on government research into soil erosion, carried out soil surveys, encouraged farmers to adopt soil conservation measures and new farming practices, and established shelterbelts and community pastures. Alberta and Saskatchewan are currently the provinces with the second and third most farms, respectively, only being surpassed in this respect by Ontario. Cattle are also a major player in the farming economy, given that Saskatchewan has the second highest number of cattle of all the Canadian provinces. Despite the frequent and sometimes disastrous droughts, the Triangle did become and still is the metaphorical breadbasket of the nation as he expected. However, the region has also suffered a major loss in terms of biodiversity over the course of settlement. In addition, the prairies have a very high rate of endangered species.

## 3: James Hector - Infogalactic: the planetary knowledge core

*Palliser, a construction camp and siding in the s, was named after Captain John Palliser who led the Palliser Expedition, a scientific exploration of British North America conducted between and*

He joined University of Edinburgh as a medical student and received his medical degree in . He retired in after four decades at the centre of organised science in New Zealand. He died in Lower Hutt in . Palliser expedition Shortly after receiving his medical degree, upon the recommendation of Sir Roderick Murchison " director-general of the British Geological Survey " Hector was appointed geologist on the Palliser Expedition under the command of John Palliser. The goal of the Palliser expedition to British North America now Canada was to explore new railway routes for the Canadian Pacific Railway and to collect new species of plants. As it was pulled from the water, his horse bolted, and while chasing after it he was kicked in the chest and knocked unconscious. Hector wrote about the expedition in his diary: His companions, thinking him dead, dug a grave for him and prepared to put him in. His premature burial was cancelled when he regained consciousness. The truer version is this " The doctor was knocked unconscious. We all leapt from our horses and rushed up to him, but all our attempts to help him recover his senses were of no avail. We then carried him to the shade of some big evergreens while we pitched camp. We were now in serious trouble, and unless Nimrod fetched in game our situation looked hopeless. One man stayed and watched the unconscious doctor. The rest of us took turns trying to catch trout that we could see in the clear mountain water of the river. Hector must have been unconscious for at least two hours when Sutherland yelled for us to come up; he was now conscious but in great pain. He asked for his kit and directed me to prepare some medicine that would ease the pain. I had him sign a document stating the facts of the accident in case his illness might prove serious. He readily agreed that it would be the proper thing to do. In he arrived in Dunedin in New Zealand to conduct a three year geological survey of Otago. He also assembled a staff of half a dozen men to assist with such tasks as fossil collecting, chemical analysis, and botanical and zoological taxonomy. As the chief Government-employed scientist, Hector gave politicians advice on questions as diverse as exporting wool to Japan and improving fibre production from New Zealand flax. His political influence was underlined by his marriage in to Maria Georgiana Monro, daughter of the speaker of the House of Representatives. He controlled virtually every aspect of state-funded science. He had close and, at times, tense relationships with other men of science, in particular Julius von Haast. Hector retired in , after four decades at the centre of organized science in New Zealand. In during a visit to Canada, he said of his mishap in Kicking Horse Pass, "When I regained consciousness, my grave was dug and they were preparing to put me in it. A portrait of Hector hangs just inside the door.

## 4: James Hector biography, New Zealand, Palliser expedition, Early life

*The British North American Exploring Expedition, commonly called the Palliser Expedition, explored and surveyed the open prairies and rugged wilderness of western Canada from to The purpose was to explore possible routes for the Canadian Pacific Railway and discover new species of plants.*

He joined University of Edinburgh as a medical student and received his medical degree in at the age of Palliser expedition[ edit ] Shortly after receiving his medical degree, upon the recommendation of Sir Roderick Murchison “ director-general of the British Geological Survey “ Hector was appointed geologist on the Palliser Expedition under the command of John Palliser. The goal of the Palliser expedition to British North America now Canada was to explore new railway routes for the Canadian Pacific Railway and to collect new species of plants. As it was being pulled from the water, his own horse strayed and, when chasing after it, Hector records, he was kicked in the chest and knocked unconscious. He wrote in his diary of the expedition: His companions, thinking him dead, dug a grave for him and prepared to put him in. His premature burial was cancelled when he regained consciousness. The doctor was knocked unconscious. We all leapt from our horses and rushed up to him, but all our attempts to help him recover his senses were of no avail. We then carried him to the shade of some big evergreens while we pitched camp. We were now in serious trouble, and unless Nimrod fetched in game our situation looked hopeless. One man stayed and watched the unconscious doctor. The rest of us took turns trying to catch trout that we could see in the clear mountain water of the river. Hector must have been unconscious for at least two hours when Sutherland yelled for us to come up; he was now conscious but in great pain. He asked for his kit and directed me to prepare some medicine that would ease the pain. I had him sign a document stating the facts of the accident in case his illness might prove serious. He readily agreed that it would be the proper thing to do. In April he arrived in Dunedin in New Zealand to conduct a three-year geological survey of Otago , soon after the discovery of gold there. He also assembled a staff of half a dozen men to assist with such tasks as fossil collecting, chemical analysis, and botanical and zoological taxonomy. Some of these men, such as William Skey mineral analyst , Richard Gore clerk , and John Buchanan botanical artist and draftsman , stayed with him for many years. As the chief Government-employed scientist, Hector gave politicians advice on questions as diverse as exporting wool to Japan and improving fibre production from New Zealand flax. His political influence was underlined by his marriage in to Maria Georgiana Monro, daughter of the speaker of the House of Representatives , David Monro. He controlled virtually every aspect of state-funded science. He had close and, at times, tense relationships with other men of science, in particular Julius von Haast. Retirement[ edit ] Hector retired in , after four decades at the centre of organised science in New Zealand. She was the daughter of politician David Monro , who was at the time the Speaker of the House of Representatives.

## 5: james hector : definition of james hector and synonyms of james hector (English)

*Sir James Hector KCMG FRS FRSE(16 March - 6 November ) was a Scottish geologist, naturalist, and surgeon who accompanied the Palliser Expedition as a surgeon and geologist.*

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## 6: James Hector : Wikis (The Full Wiki)

*James Hector - Sir James Hector KCMG FRS FRSE was a Scottish geologist, naturalist, and surgeon who accompanied the Palliser Expedition as a surgeon and geologist. He was born at 11 Danube Street in Stockbridge, Edinburgh the son of Alexander Hector WS and his wife and he attended the Edinburgh Academy from to*

This desire arose as the time approached for the fur-trade monopoly to apply to the British parliament for a renewal of its charter: Known today respectively as the Palliser British and the Hind Canadian surveys, the two expeditions overlapped very little of the country they charted and assessed, but they did coincide in one major respect: As with British mariners in the Arctic, these eighteenth-century schemata had remained fundamental to the early- and mid-nineteenth century British perception of Britain and the rest of the British empire; indeed, the years alone witnessed separate invocations of the Sublime to convey the uninhabitability of two monumental regions of present-day Canada. I John Palliser was an Irish aristocrat who loved to hunt buffalo. He had spent and hunting them in the Missouri watershed of the northern United States,<sup>2</sup> and when he set about organizing his famous survey expedition one decade later his initial aim was only to get himself and his gun back to the prairies. But by the time he embarked for North America on 15 May , he was in the employ of various British institutions and was charged with acquainting the British Parliament and citizenry with that unknown portion to the West lying between N. Captain Palliser was not alone on this venture but neither was he accompanied by fellow sportsmen: Why an aristocratic sportsman should have remained the leader of this scientific survey remains an interesting question that Irene M. As well, notes Spry, he demonstrated unbounded resilience in the face of difficult conditions: He had not only survived a solitary winter journey on the prairies [in ], but had revelled in it. He took pride in his ability to go fast and far, keeping up with negative voyageurs. He relished the challenge of having to shoot his own dinner or go without it He was prepared to stake his ability as a hunter against hunger and even starvation, his toughness against the hazards and privations of a long journey through a little-known and difficult country. The British preference for the picturesque landscape-undulating, well-watered parkland of delimited scope and scale, and exhibiting only moderately-sized geographical features - over sublime vertical or horizontal vastness had issued, time and again before , in ecstatic responses to the aspen groves of the North Saskatchewan River valley and more northern parklands, but in nearly complete silence towards the vast, open grasslands in the vicinity of the South Saskatchewan River. But one of the leading contributors to European responses to the grasslands as sublime was the infrequency of prospect points. The Claude glass, named for the Franco-Italian whose landscape paintings of the Roman campagna helped define landscape appreciation in Britain and, later, in North America, was one of the devices used to provide a frame through which to gain the "correct" view of nature. Another was the camera obscura, a tinted mirror which, when the viewer faced it towards the landscape as he turned his back to nature, provided an instant landscape picture. Frequently without a prospect point from which to compose an orderly view of the landscape, Palliser felt that nature controlled his destiny. Few individuals, however, are capable of shedding the perceptual modes of their societies: II After steaming to Isle Royale in Lake Superior and pushing ahead to the fur-trade route by canoe from there, Palliser camped his party above Kakabeka Falls on the "beautifully picturesque" Kaministikwia River in mid The morning was exceedingly beautiful We halted on the right bank of the [Namakan] river at one of the most lovely spots for agricultural purposes that we have seen on the whole route. There was something in the natural grouping of the trees and shrubs at this place which irresistibly called to mind rural scenes at home, and it was hard to realize the fact that the hand of man had taken no part in producing this effect. We found here the remains of an Indian camp, among which, in a secluded grove, were several coffins raised above the ground upon posts to the height of 5 or 6 feet Here were fine oaks and ash growing singly and in clumps, as if in grounds laid out by the landscape gardener, land a shrubby growth of underwood interspersed with large willows grew luxuriantly. Furthermore, the Gilpinian picturesque, less ordered and decorous than the Brownian, was discovered on the Winnipeg River at Rat Portage modern Kenora, Ontario , where "The scenery. This route offered the men their first view of the grasslands: Yet, despite their initial feeling that the land was "dead," they discovered that the

region teemed with life: After again proceeding on the march we encountered irregular country with many hollows, and traversed by small creeks, thus rendering the road very bad. The heat throughout the day has been excessive, and, towards evening, a cloud of great density appeared in the northwest, and before we could erect our tents a heavy thunder-shower fell. Our encampment afforded excellent feeding for our horses, the grass for some miles around growing far above the knees. Since the shower, millions of insects have infested our tents Travelling here is more like passing through a tropical country, so numerous and plentiful is insect life. Without doubt, the near-tropical verdancy in the land truly surprised Palliser and the botanist, Bourgeau. Still, what sustains the men aesthetically is a return to the Picturesque; from tropical safairing, they advanced on 31 July to Pembina Hill, where the undulating land reminded them of Britain: This method, first articulated in a philosophical context by Archibald Allison and first advocated as a means of landscape appreciation by Richard Payne Knight, had been employed exclusively and consciously in a description of prairies by Washington Irving, whose *A Tour of the Prairie* maps American grasslands in terms of Spanish, German, French, and English landscapes that its author had come to know intimately during the seventeen years before his return to the United States. On 11 August, James Hector scaled the "gentle swell" of Turtle Mountain, from whose summit "he obtained not only an extensive view to the north, but away to the south and west over American territory, where nothing as far as the eye could reach was to be seen but bare and barren prairie stretching in every direction" The party then continued northward, skirting the open plain at modern Deloraine and Lauder, Man. Here, out of the arid "Triangle," the party re-horsed and re-supplied for a variety of side trips to the Moose Mountain district during the second half of August. Our course [on 15 Sept. Attending the purely aesthetic response are the concerns over Indians and provisions: Aware of all these factors, Palliser nevertheless had his mandate to survey along the international border. Thus, the riders wested only as far as modern Riverhurst Ferry on Lake Diefenbaker, above the Elbow of the South Saskatchewan before veering north to reach the parkland at Carlton House on 8 October. Offended by drunken and violent Indians, he spent much of the intervening months away from the fort on three trips-to the Thickwook Hills in the late autumn, to Fort Edmonton and Rocky Mountain House in the winter, and to Fort Pitt in the spring. But, like most Britons who had written about them, he delighted in the environs of Carlton House since they lay in the parkland portion of the North Saskatchewan valley. One example of this delight is his description of a grouse-shooting excursion to the west of the fort on 13 October: The distribution of wood is most beautiful, resembling that of a home park The mere act of shooting grouse surely sponsors certain familiar landscape associations for the geologist; coupled with his relief at being once in wooded areas whose short grass can resemble a lawn, these associations form a mental landscape commensurate with "home. He considered the most attractive springtime view in the parkland to be the site of the present-day battlefords, the same sight by which Rev. Robert Terrill Rundle had been allured in "The most beautiful part of the river is near the mouth of the Battle River" Habitation is a clear possibility in this parkland region where aesthetic pleasures abound; indeed, it was only the parkland which Palliser and his men came to recommend for settlement by Britons. In his summation to the secretary in , Palliser described it as "a partially wooded country, abounding in lakes and rich natural pasturage, in some parts rivalling the finest park scenery of our own country" Of course, implicit in this response is a certain social message: Moreover, the farming of it appeared to involve no more than tending Eden. Soil conditions appear beyond his consideration at this time as he joins the ranks of those who stressed the dichotomy between the worthlessness of the grasslands and the wonderfulness of the parklands. The factual, scientific survey was beginning only to reinforce the previously-drawn aesthetic dichotomy of the Prairies. The scenery in the neighbourhood of the Wiguatton [coulee] is very beautiful and diversified. Fine bluffs of wood and open glades, hills with bold outlines, rising sometimes feet above the level of the valley, abrupt escarpments of white chalky strata with ferruginous streaks, desolate wastes of blown sand, and beautiful lakes with clear limpid water, are all combined within a small compass in this neighbourhood. There are a few spots where the soil is rich, but as a rule this region is barren and desolate. Sullivan captures the sentiments of all the Britons when he states on 23 July, in response to his first view of the Rocky Mountains from the site of the present-day Hillsdown, Alberta, that, "Great excitement prevailed among our party at this sudden and unexpected sight, and we all looked to the Rocky Mountains as the long desired object which was

to relieve us from the monotony of prairie life" From there, Hector rode west into the mountains up to Bow River valley while Palliser travelled straight down to the international border near the Waterton Lakes, and then back up to Old Bow fort, in the Bow River valley at Stoney Indian Park. For his part, Palliser found the valley and the river an aesthetic delight: His impressive seven-week circuit concluded when he rode into Fort Edmonton on 20 September. As a geologist, Hector relished the opportunity to surround himself with mountains. Travelling westward from Slaughter Camp on 6 August, he found "the snow of the mountains in the foreground, sharply lined by projecting ledges of rock Hector crossed the mountains first at Vermilion Pass, and then he proceeded up the Kootenay and down the Beaverfoot Rivers to the Kicking Horse River, whose Pass he discovered at the end of August, and where the violent and nearly fatal accident with his mount gave the river and pass the names they bear today. He named Mount Murchison, Lyell Glacier, and Mount Forbes after those senior and prominent Victorian geologists whom he revered, and then continued north to the headwaters of the North Saskatchewan River, returning to Fort Edmonton on 7 October. But even fierce winter weather could not keep Hector away from the mountains; he was among them again in January, when he composed a picture of Jasper House in the frame of a single paragraph: Jasper House is beautifully situated on an open plain, about six miles in extent, within the first range of the mountains. As the valley makes a bend above and below, it appears to be completely encircled by mountains, which rise from 4, to 5, feet, with bold craggy outlines; the little group of buildings which form the "fort" have been constructed, in keeping with their picturesque situation, after the Swiss style, with overhanging roofs and trellised porticos. Loneliness compounded lamentation, for in Palliser, Sullivan, and Hector usually surveyed apart from one another; Bourgeau had returned to Europe to study plant life in the Russian Caucasus, while Blakiston, prevented from canoeing down the South Saskatchewan by Palliser, who feared for his life in the middle of the Triangle, had resigned and voyaged to Asia where he charted the Yangtze River. Mid-June saw the expedition struggling down the Red Deer River valley near the present-day Dinosaur Provincial Park, where Palliser found "a wretched soil everywhere; the horses miserably off for grass" But he persisted, passing through the Badlands and coming far into the Triangle. He reached the confluence of the Red Deer and the South Saskatchewan on a blistering 18 July, but was still nearly two hundred miles shy of Riverhurst Ferry, the most westerly point reached in Of great significance is the landscape that Palliser chose to describe from the forks of the rivers. It was not an imaginative landscape projection of the uncharted Centre of the Triangle, a stretching gaze eastward; instead, he turned his back to the east and described the views up the two rivers Palliser loathed the country. Generally, the Triangle corresponds, of course, to what is known today as the fertile breadbasket of Canada. Found a human skull on the plain We camped on a swamp, where we killed several snakes" The expedition travelled in the short-grassland prairie because its orders included a survey of the international border. After resting at the oasis of the "arid" country--Cypress Hills--at the close of July, Palliser was satisfied with, and exhausted from his travels in the Triangle, as well as tired of placating marauding Indians. He turned his survey round to the west long before covering the base of the Triangle over to Moose and Turtle Mountains. Almost immediately, aesthetic appreciations began again to flow from pens: Hector rejoiced at his arrival on 13 August at the banks of the Bow River, at a point near the southern city limits of present-day Calgary: We started at noon to-day; At the same time the whole camp started, and as the long straggling train of [Stony Indian] men, women, and children, ditto the loaded horses and dreads [travois], wound up the zigzag trail that leads from this pretty little valley to the level of the plain above, the scene was very picturesque The pasture is now very fine everywhere, and timber plentiful in many places, as we have now entered the belt of fine country that skirts the base of the mountains. In September, he turned into a dead end at the Purcell Mountains, whose egress would not be discovered until Rogers Pass and Albert Canyon were opened by railway surveyors more than a decade later. From there, he proceeded along the nominal fur-trade route, first established by Thompson in , to Fort Colville on the lower Columbia and below the international border, where he rendezvoused with Palliser and Sullivan, and with members of the British Boundary Commission who had been cutting the boundary line inland from the Pacific Ocean. The open appearance of the country was very pleasant to us, and even seemed to put new life into the horses. The ground was dusty, and the bunch-grass is more sparse than turf, but in other respects it was like riding through the open glades of a deer park, and if we

had only been supplied with a sufficiency of good food at the time, there are few spots in the country that would have left a pleasanter impression than the upper part of the Columbia Valley. Like Hector, Palliser was searching for a route that penetrated the Purcell Range north of the 49th parallel, but the Kootenay Indians counselled him against wasting his time. In view of the advice, Palliser decided to descend to Fort Colville and resupply there for an effort northeastward or northwestward. Limited success was achieved. His massive survey had reached an exhausted conclusion in an obscure mountain valley, near another that had been likened by a boundary engineer to the "happy valley of Rasselas. Like Palliser, whose preliminary reports would be known to him before his Narrative was completed, he understood his appointment to be a survey of the "physical aspect of the country. Clearly, Hind intended that a narrative prepared for a public readership follow the generical demands of travel literature.

## 7: Palliser expedition - WikiVisually

*The goal of the five-man expedition--Palliser, Hector, Blackiston, Bourgeau and Sullivan--was to map the transportation routes to, from, and through the Rocky Mountains, to assess the potential of the prairies for settlement and agriculture, and to locate any natural resources.*

Block F, Row 7, Plot 54 Profile: The gravesite of Douglas Hector represents a piece of Canadian history. Died August 15, James Hector was trained as a medical doctor and geologist in Scotland. In the late s, he joined the Palliser Expedition to map the Canadian west and look for a suitable pass through the Rocky Mountains for a railway. Hector and a small group of men were exploring the area around Field when his horse kicked him in the chest. Hector was rendered unconscious, and his companions actually believed he was dead. They were digging his grave when he came to, but Hector was in very bad shape. He asked one of his companions to make up a medical mixture at his instructions, but the man was terrified he would get the blame if Hector died, so he asked Hector to sign a waiver before he would administer the medicine. After the completion of the Palliser Expedition, Hector made his way to New Zealand, where he was involved in more survey work. He established his family there and was eventually named Chancellor of the University of New Zealand. In , the CPR invited him to return to Canada and give talks to interested groups across the country. He decided to bring one of his sons, Douglas. The pair traveled by boat to Vancouver where they got on a train and began their journey. He was rushed to the Queen Victoria Cottage Hospital with appendicitis, but he died of peritonitis after his appendix burst. Almost a year later, Arthur O. Wheeler, who was working on the geographical survey of the Selkirk Range, and T. The laying of the monument has just been completed. It is a beautiful yet massive piece of work. The stone selected is the big-grained granite of the Cascade Range, polished and hewn to the size and shape of the grave on which it is laid horizontally, set on a basement of the finer-grained granite, of which the CPR corner stones are cut.

**8: Palliser expedition | Revolv**

*After the expedition, Hector would be known as the geographer, geologist, surveyor, cartographer, meteorologist, ethnologist, physician, botanist, and data recorder, who co-authored the Palliser Report and authored the two major scientific articles that followed.*

The devoutly Protestant Pallisers combined social eminence and a lively social, artistic, and intellectual life with a tradition of public service and conservative politics. Palliser was largely educated abroad and spoke French, German, and Italian, though in English his spelling was erratic. He entered Trinity College, Dublin, in , attended intermittently, and abandoned his studies in without taking a degree. Other interests and activities claimed him. When the regiment was mustered in Palliser was in North America. He left the west in and visited New Orleans and Panama before returning home in . Back in London, where he lived with his great friend William Sandys Wright Vaux of the British Museum, Palliser wrote a lively book about his North American adventures, *Solitary rambles and adventures of a hunter in the prairies*, published in London in , and it went through a number of editions. His proposal was for a personal journey, with local voyageurs and hunters, across the little known plains and mountains immediately north of the 49th parallel. Keenly aware of official American explorations underway since to discover railway routes to the Pacific, the society took immediate action. Little dependable information was available about the geographic features of the plains, their geology, climate, flora, fauna, and resources. Palliser was one of the few men with experience of travel on the prairies who was detached from the growing controversy about the future of western British North America. At Sault Ste Marie they picked up two waiting canoes with their voyageur crews and proceeded by steamship across the ice-covered Lake Superior to Isle Royale, Mich. While organizing men, horses, carts, provisions, Indian presents, ammunition, and other supplies, for which Simpson and the HBC had made preparation, the explorers consulted knowledgeable local people and studied the Red River Settlement. Near the Elbow they turned northeast to Carlton House Sask. While waiting for a reply he revisited New Orleans, returning to Carlton House for an early start in the spring of . Meanwhile, Blakiston had joined the party at Carlton House, having brought the delicate instruments needed for magnetical observations by way of Hudson Bay, and he carried on hourly observations. Near modern Irricana Alta the party separated to probe into the mountains for feasible passes. Palliser and Sullivan made a dash to the American boundary before crossing the mountains by the North Kananaskis Pass. Returning by the North Kootenay Pass, they rejoined the rest of the party to winter at Edmonton. Blakiston, who had traversed both Kootenay passes, now left the expedition because of a quarrel with Sullivan which had widened to include Palliser. Hector had crossed the mountains through Vermilion Pass and returned by the Kicking Horse Pass; he devoted the winter to further exploration. In its final season, , the expedition travelled southeast to the forks of the Red Deer and South Saskatchewan rivers in an attempt to connect with their westernmost point in , and then south to the Cypress Hills, where the party broke up. Brisco and Mitchell went to Fort Benton Mont. Hector travelled northwest to cross the Rockies by Howse Pass in a final but unsuccessful attempt to discover a way through to the Pacific coast. Sullivan took the horses overland to Fort Colville Colville, Wash. At Fort Colville Palliser and Sullivan re-equipped themselves to cross the border again for a final attempt to complete exploration of a route through British territory. Palliser sent Sullivan eastward from Fort Shepherd B. Palliser was thus satisfied that a route through British territory had been established. Before the work of the expedition was finished a final report had to be written and its bills, which greatly exceeded the Treasury appropriations, verified and settled. The reports, which appeared in , , and , and the great map provided the first comprehensive, careful, and impartial observations to be published about the southern prairies and Rocky Mountains in what is now Canada. Settlers with cattle would prefer the much easier route through the United States; only mineral discoveries would provide economic justification for a route north of the border. They concluded that, though a railway might be built through the Rockies by one or other of the passes examined by the expedition, the cost of pushing road or rail through to the Pacific by any route entirely within British territory would be prohibitive. They urged the importance of providing for the future of the Indian inhabitants of the west before the buffalo disappeared and

settlers began to flood into the country. The expedition had itself managed to avoid any serious clash with the plains Indians, but foresaw danger when settlement began. The expedition earned Palliser the gold medal of the Royal Geographical Society in 1847, and, in 1848, a cmg. That same year he went off to the West Indies on a semi-official mission, the nature of which remains a mystery. In 1849 he undertook yet another notable voyage, this time with his brother Frederick Hugh, in his own specially reinforced craft, to Novaya Zemlya U. Again, big game and exploration were twin objectives. Such ventures were costly. Born to wealth, neither Palliser nor his brothers seem to have been able to adapt themselves to a serious decline in the family fortune. Frequent travel meant that Palliser was not often at home to look after the family estates. These estates were heavily mortgaged, and had to be rescued by Fairholme money. When Palliser died they passed to his eldest niece, Caroline Fairholme. There John Palliser died. He lies in a grave in little Kilrossanty churchyard. A few new fragments of information have come to light since that work was done, in private, personal papers in Denmark and Ireland.

## 9: James Hector - Wikipedia

*While Palliser departed from Montreal on 11 October in order to determine on a strategy and to obtain his orders for the following summer's survey, Hector took charge of the wintering party. He disliked life at the Hudson's Bay company post.*

Surveying – Surveying or land surveying is the technique, profession, and science of determining the terrestrial or three-dimensional position of points and the distances and angles between them. A land surveying professional is called a land surveyor, Surveyors work with elements of geometry, trigonometry, regression analysis, physics, engineering, metrology, programming languages and the law. Surveying has been an element in the development of the environment since the beginning of recorded history. The planning and execution of most forms of construction require it and it is also used in transport, communications, mapping, and the definition of legal boundaries for land ownership. It is an important tool for research in other scientific disciplines. Basic surveyance has occurred since humans built the first large structures, the prehistoric monument at Stonehenge was set out by prehistoric surveyors using peg and rope geometry. In ancient Egypt, a rope stretcher would use simple geometry to re-establish boundaries after the floods of the Nile River. The almost perfect squareness and north-south orientation of the Great Pyramid of Giza, built c. The mathematician Liu Hui described ways of measuring distant objects in his work Haidao Suanjing or The Sea Island Mathematical Manual, the Romans recognized land surveyors as a profession. They established the basic measurements under which the Roman Empire was divided, Roman surveyors were known as Gromatici. In medieval Europe, beating the bounds maintained the boundaries of a village or parish and this was the practice of gathering a group of residents and walking around the parish or village to establish a communal memory of the boundaries. Young boys were included to ensure the memory lasted as long as possible, in England, William the Conqueror commissioned the Domesday Book in It recorded the names of all the owners, the area of land they owned, the quality of the land. It did not include maps showing exact locations, Abel Foullon described a plane table in , but it is thought that the instrument was in use earlier as his description is of a developed instrument. Gunter's chain was introduced in by English mathematician Edmund Gunter and it enabled plots of land to be accurately surveyed and plotted for legal and commercial purposes. Leonard Digges described a Theodolite that measured horizontal angles in his book A geometric practice named Pantometria, Joshua Habermel created a theodolite with a compass and tripod in Johnathon Sission was the first to incorporate a telescope on a theodolite in , in the 18th century, modern techniques and instruments for surveying began to be used. Jesse Ramsden introduced the first precision theodolite in and it was an instrument for measuring angles in the horizontal and vertical planes 2. Prairie – Temperate grassland regions include the Pampas of Argentina, southern Brazil and Uruguay as well as the steppes of Eurasia. Lands typically referred to as prairie tend to be in North America, the Central Valley of California is also a prairie. The Canadian Prairies occupy vast areas of Manitoba, Saskatchewan, Prairie is the French word for meadow, but the ultimate root is the Latin pratum. The formation of the North American Prairies started with the upwelling of the Rocky Mountains near Alberta, the mountains created a rain shadow that resulted in lower precipitation rates downwind, creating an environment in which most tree species will not tolerate. The parent material of most prairie soil was distributed during the last glacial advance that began about , years ago, the glaciers expanding southward scraped the landscape, picking up geologic material and leveling the terrain. As the glaciers retreated about 10, years ago, it deposited this material in the form of till, wind based loess deposits also form an important parent material for prairie soils. Tallgrass Prairie evolved over tens of thousands of years with the disturbances of grazing, native ungulates such as bison, elk, and white-tailed deer, roamed the expansive, diverse, plentiful grassland before European colonization of the Americas. For 10, , years native people used fire annually as a tool to assist in hunting, transportation, evidence of ignition sources of fire in the tallgrass prairie are overwhelmingly human as opposed to lightning. Humans, and grazing animals, were participants in the process of prairie formation. Without disturbance, trees will encroach on a grassland, cast shade, Prairie and widely spaced oak trees evolved to coexist in the oak savanna ecosystem. In spite of long recurrent droughts and occasional torrential rains, the grasslands of the Great Plains were not

subject to soil erosion. The root systems of native prairie grasses firmly held the soil in place to prevent run-off of soil, when the plant died, the fungi, bacteria returned its nutrients to the soil. These deep roots also helped native prairie plants reach water in even the driest conditions, the native grasses suffered much less damage from dry conditions than the farm crops currently grown. Prairie in North America is usually split into three groups, wet, mesic, and dry and they are generally characterized by tallgrass prairie, mixed, or shortgrass prairie, depending on the quality of soil and rainfall. In wet prairies the soil is very moist, including during most of the growing season. The resulting stagnant water is conducive to the formation of bogs, wet prairies have excellent farming soil. Wilderness

Wilderness or wildland is a natural environment on Earth that has not been significantly modified by human activity. Some governments establish them by law or administrative acts, usually in land tracts that have not been modified by human action in great measure, the main feature of them is that human activity is restricted significantly. These actions seek not only to preserve what already exists, but also to promote and advance a natural expression, Wilderness areas can be found in preserves, conservation preserves, National Forests, National Parks and even in urban areas along rivers, gulches or otherwise undeveloped areas. These areas are considered important for the survival of species, biodiversity, ecological studies, conservation, solitude. Wilderness is deeply valued for cultural, spiritual, moral, some nature writers believe wilderness areas are vital for the human spirit and creativity. They may also preserve historic genetic traits and provide habitat for flora and fauna that may be difficult to recreate in zoos. The word wilderness derives from the notion of other words. The mere presence or activity of people does not disqualify an area from being wilderness, many ecosystems that are, or have been, inhabited or influenced by activities of people may still be considered wild. This way of looking at wilderness includes areas within which natural processes operate without human interference, the WILD Foundation states that wilderness areas have two dimensions, they must be biologically intact and legally protected. The World Conservation Union classifies wilderness at two levels, Ia and Ib, activities on the margins of specific wilderness areas, such as fire suppression and the interruption of animal migration also affect the interior of wildernesses. Especially in wealthier, industrialized nations, it has a legal meaning as well. Many nations have designated wilderness, including Australia, Canada, New Zealand, South Africa, looked at through the lens of the visual arts, nature and wildness have been important subjects in various epochs of world history. An early tradition of landscape art occurred in the Tang Dynasty, the tradition of representing nature as it is became one of the aims of Chinese painting and was a significant influence in Asian art. In the 13th century, Shih Erh Chi recommended avoiding painting scenes lacking any places made inaccessible by nature, for most of human history, the greater part of the Earth's terrain was wilderness, and human attention was concentrated in settled areas. The first known laws to protect parts of nature date back to the Babylonian Empire, Ashoka, the Great Mauryan King, defined the first laws in the world to protect flora and fauna in Edicts of Ashoka around 3rd Century B. They were motivated by a desire to be able to hunt wild animals in private hunting preserves rather than a desire to protect wilderness, nevertheless, in order to have animals to hunt they would have to protect wildlife from subsistence hunting and the land from villagers gathering firewood. Similar measures were introduced in other European countries, the idea of wilderness having intrinsic value emerged in the Western world in the 19th century. Except for Winnipeg, which is the largest city in Manitoba, Manitoba established as a province of Canada in 1870, following the enacting of the Manitoba Act. Saskatchewan, Established as province in 1905, with the implementation of the Saskatchewan Act, Alberta, In 1905, the same year as Saskatchewan, Alberta also was established as province. While Vancouver serves as the largest metropolitan area in Western Canada, the following is a list of these areas and their populations as of 2006. Both Alberta and Saskatchewan are landlocked between British Columbia and Manitoba, the Canadian Prairies are part of a vast sedimentary plain covering much of Alberta, southern Saskatchewan, and southwestern Manitoba. The prairies form a significant portion of the area of Western Canada. The plains generally describes the expanses of flat, arable agricultural land which sustain extensive grain farming operations in the southern part of the provinces. Despite this, some such as the Cypress Hills and Alberta Badlands are quite hilly. In Alberta and British Columbia, the Canadian Cordillera is bounded by the Rocky Mountains to the east, the Canadian Rockies are part of a major continental divide that extends north and south through western North America and western South America.

The continental divide also defines much of the border between Alberta and British Columbia, the Columbia and the Fraser Rivers have their headwaters in the Canadian Rockies and are the second- and third-largest rivers, respectively, to drain to the west coast of North America. To the west of their headwaters, across the Rocky Mountain Trench, is a belt of mountains. The coast of British Columbia enjoys an oceanic climate because of the influence of the Pacific Ocean. Winters are typically wet and summers relatively dry and these areas enjoy the mildest winter weather in all of Canada, as temperatures rarely fall much below the freezing mark. The mountainous Interior of the province is drier and has colder winters, Alberta has a dry continental climate with warm summers and cold winters. The province is open to cold Arctic weather systems from the north, winters are generally quite cold, though some areas can experience a phenomenon known as the chinook wind, wherein warm winds raise the winter temperatures temporarily 5. Royal Geographical Society

â€” The Royal Geographical Society is the UK's learned society and professional body for geography, founded in for the advancement of geographical sciences. Today, it is the centre for geographers and geographical learning. The Society has over 16, members and its work reaches millions of people each year through publications, research groups, the Geographical Society of London was founded in under the name Geographical Society of London as an institution to promote the advancement of geographical science. Like many learned societies, it had started as a club in London. In , the Society finally found a home when it moved to 1 Savile Row, London â€” an address that became associated with adventure. The Society also used a lecture theatre in Burlington Gardens, London which was lent to it by the Civil Service Commission, however, the arrangements were thought to be rather cramped and squalid. In the same year the Societys ban on women was lifted, Lowther Lodge was built in for the Hon William Lowther by Norman Shaw, one of the most outstanding domestic architects of his day. The history of the Society was closely allied for many of its years with colonial exploration in Africa, the Indian subcontinent, the polar regions. It has been a key associate and supporter of many explorers and expeditions, including those of Darwin, Livingstone, Stanley, Scott, Shackleton, Hunt. The early history of the Society is inter-linked with the history of British Geography, exploration, information, maps, charts and knowledge gathered on expeditions was sent to the RGS, making up its now unique geographical collections. The Society published its first journal in and from , accounts of meetings, in , this was replaced by The Geographical Journal which is still published today. With the advent of a systematic study of geography, the Institute of British Geographers was formed in , by some academic Society fellows. Its activities included organising conferences, field trips, seminars and specialist research groups and publishing the journal, the RGS and IBG co-existed for 60 years until when a merger was discussed 6. Geography â€” Geography is a field of science devoted to the study of the lands, the features, the inhabitants, and the phenomena of Earth. It is often defined in terms of the two branches of geography and physical geography. Geography has been called the world discipline and the bridge between the human and the physical sciences, Geography is a systematic study of the Earth and its features. Traditionally, geography has been associated with cartography and place names, although many geographers are trained in toponymy and cartology, this is not their main preoccupation. Geographers study the space and the temporal database distribution of phenomena, processes, because space and place affect a variety of topics, such as economics, health, climate, plants and animals, geography is highly interdisciplinary. The interdisciplinary nature of the approach depends on an attentiveness to the relationship between physical and human phenomena and its spatial patterns. In a word Geography is a Scienceâ€”a thing not of mere names but of argument and reason, of cause, just as all phenomena exist in time and thus have a history, they also exist in space and have a geography. Geography as a discipline can be split broadly into two main fields, human geography and physical geography. The former largely focuses on the environment and how humans create, view, manage. The latter examines the environment, and how organisms, climate, soil, water. The difference between these led to a third field, environmental geography, which combines physical and human geography. Physical geography focuses on geography as an Earth science and it aims to understand the physical problems and the issues of lithosphere, hydrosphere, atmosphere, pedosphere, and global flora and fauna patterns. Physical geography can be divided into broad categories, including, Human geography is a branch of geography that focuses on the study of patterns. It encompasses the human, political, cultural, social, and it requires an

understanding of the traditional aspects of physical and human geography, as well as the ways that human societies conceptualize the environment. Integrated geography has emerged as a bridge between the human and the geography, as a result of the increasing specialisation of the two sub-fields. Examples of areas of research in the environmental geography include, emergency management, environmental management, sustainability, geomatics is concerned with the application of computers to the traditional spatial techniques used in cartography and topography 7. Soil

Soil is a mixture of minerals, organic matter, gases, liquids, and countless organisms that together support life on Earth. Soil is called the Skin of the Earth and interfaces with the lithosphere, the hydrosphere, the atmosphere, the term pedolith, used commonly to refer to the soil, literally translates ground stone. Soil consists of a phase of minerals and organic matter, as well as a porous phase that holds gases. Accordingly, soils are often treated as a system of solids, liquids. Soil is a product of the influence of climate, relief, organisms, Soil continually undergoes development by way of numerous physical, chemical and biological processes, which include weathering with associated erosion.

Mahalaxmi calendar 2018 Sir Walter Raleigh Lonely Planet Trekking in the Indian Himalaya Pt. I. 1620-1638. Love in the Great Southland (Heartsong Presents #324) Elliots vocabulary of Cayuga The inherent right Pennies in the Fountain The Subterranean Dungeon Foundations of Stochastic Differential Equations in Infinite Dimensional Spaces (CBMS-NSF Regional Confer Interactive computer aided architectural design Cancer in practice Us air force survival handbook Mountains (The Living World) Long Trail (Klondike Kid) A dictionary of literary terms cuddon Thinking globally about religion Mark Juergensmeyer Sharing sites list 2016 The omnivore dilemma full text Daimonic Reality: Understanding Otherworld Encounters Europe, or the infinite task The absence of Mr. Glass G.K. Chesterton He Came Preaching Peace Poverty, early literacy achievement, and education reform Julia Parkinson and Brian Rowan Toussaint L Ouverture (World Leaders Past Present) Universal self scorer chemistry Laws guide to nature drawing and journaling So much for the burning queen Appendix A: Major conferences The designs of Kathie Winkle for James Broadhurst Sons Ltd 1958-1978 The classical spirit V. 4. Soviet nuclear weapons by Thomas B. Cochran . [et al.] Hg well war of the worlds Economic basis of protection The five forms of service The early Neolithic settlement at Sesklo Three Mahabharata verse plays Waterproof Dominican Republic and Haiti Map by ITMB At Spillis Candela and Partners Going Down for Air