6165 Murray Place, Halifax, NS B3H 1R9

July 21, 2016

To: Mayor Savage and Council Halifax Regional Municipality

I am writing in support of the proposal that the Nature Conservancy of Canada and the city of Halifax acquire the Clayton Developments property in the area of Williams and Colpitt Lake lying within the area popularly called the Purcell's Cove Backlands or just "the Backlands".

I can site two major factors that in combination make this a particularly valuable and unusual asset for Halifax.

## (i) Good representation of the Globally Rare, Nationally Unique Atlantic Coast Jack Pine-Broom Crowberry Barrens (JP/BC barrens)

This plant community is characterized by the unique combination of the boreal Jack Pine which is close to its southern limit in Nova Scotia, and the southern Broom Crowberry is at its northern limit in Nova Scotia.

Jack Pine is rare along the Atlantic coast of Nova Scotia, Broom Crowberry is a threatened species outside of Nova Scotia; in Nova Scotia, its populations have been hard hit by loss of most of our sand barrens and ongoing loss of our rock barrens, its two major habitats. The combination of these two species occurs only on exposed outcrops along the Atlantic coast from the Aspotogon Peninsula to Canso; and only fleetingly in northern Maine, where it gets displaced by the southerly Pitch Pine. That's it. As well as being a "Pine Barrens" community which has high conservation value in the U.S., it is a very unique type of Pine Barrens community. Between myself and Dr. Nick Hill, a well known field botanist/ecologist in Nova Scotia, we have visited most places where this community type occurs in Nova Scotia and can say that the Backlands provide the largest single block where this community is very common, and also that the JP/BC barrens are amongst, if not the most, healthy overall.

So the Backlands are a very significant area for this rare community. But on top of that, the JP/BC Barrens are exceptionally beautiful; they are iconic really. A couple of years ago, Panayoti Kelaidis was invited to Halifax by the Atlantic Rhododendron & Horticultural Society (ARHS). Panayoti is a highly acclaimed and popular American Horticulturalist based in Denver, Colorado. He was for many years the Curator of Plant Collections at the famed Denver Botanical Gardens, and has domesticated many wild species for horticultural use. The

ARHS asked me to take Panayoti with a small group to the JP/BC barrens. I took them into the JP/BC barrens via Ocean View Drive, where they merge into the Williams Lake watershed. We walked easily along the hard rock path into an area where depressions in the granite rock containing wetland species such as our beautiful (but under-appreciated) Mt. Holly, and Rhodoroa, our native Azalea, pocket a BC/JP barrens replete with "dwarf" Jack Pines. They are underlain by carpets of Broom crowberry, and backed by low bushes of huckleberry and occasional small erratics are scattered about. "Bonsai Garden" remarked Panayoti, very much entranced by it. So were we all.

Relatively few Haligonians are familiar with these lands. Even most of these "Rhodo" aficionados hadn't realized the treasure we have in the backlands. That's probably a good thing to this point. The JP/BC barrens can become very iconic, and a great attraction for people but we must take care not to degrade them. The opportunity to involve the NCC in this process is thus very significant. As well, the local community, as expressed in the Backlands Coalition, has shown itself to be willing to be actively involved, and this will be required in the development, monitoring and maintenance of appropriate trails. Already, some "wilderness runners" have cleared a wilderness trail though the Williams Lake Backlands, which is popular amongst those who know it. It is sensitively placed and constructed and maintained.

The Jack Pine/Broom Crowberry Barrens are not contiguous, but rather can be described as a set of islands in the Backlands, some larger some smaller, all on the more exposed outcrops. A large network of JP/BC barrens occurs to the southeast of the Governor's Brook development (which unfortunately pulverized a significant portion of this network), and is simply a wonderful place to walk, and its easy to walk. It is also now a pre-eminent area for mountain biking, which is actually very compatible with conservation of the JP/BC barrens, as it is focused on narrow sections of the bedrock and there is little peripheral damage. That's a huge asset. Most of that network is on the HRM lands now under NS Nature Trust Management, but a portion is on the corner of the Clayton property. The largest contiguous block of JP/BC barrens in the Backlands occurs in the Clayton property in an area of about 22 ha just east of Colpitt Lake; spectacular JP/BC barrens, even in their recently burnt state, occur on the ridge above the south side of Williams Lake, and others are scattered through the Clayton property. One site of Jack Pine is very unusual, in a fen, again exceptionally beautiful. It's hard slugging to get to now, but appropriately built and managed wilderness trails will allow such areas to be experienced by many.

# (ii) The Clayton property is the largest block of private land in the Backlands and a key component in conservation of the Jack Pine/Broom crowberry Barrens.

The Backlands encompass approximately 1350 ha. It is a small area, and we need to protect as much of it as possible to conserve the priceless JP/BC barrens and other communities and habitats. Currently 120 ha are formally protected and 508 ha are in crown land, giving a total of approx. 46.5% of the land protected from development. The Clayton property is 162 ha, which would bring the proportion up to 58.5%. That is a very significant number. Conservationists estimate that we need 50-60% of the landscape protected to prevent major losses of species and communities. But on top of that, we also need connectivity, and with the Clayton property there is connectivity from Williams Lake southeast to Powers Pond. Without it we are missing both significant area and significant connectivity.

#### There is more, lots more

I could wax and wane about the Backlands and the Clayton property/Williams Lake Watershed in particular for many more pages. It's not that I grew up there. I didn't but as a young family living on the Peninsula, we often swam in Williams Lake. I didn't know the other areas until well into my 60s when I began to get serious about getting to know the lands right around me. (My specialty had been marine biology, and I spent most of my recreational time in coastal areas.) In 2006, I went on a hike down to Colpitt Lake and thence to Williams Lake through the then McCurdy property with Burkhard Plache of the Halifax Field Naturalists. It was then that I was smitten with the Jack Pines and Broom Crowberry. But it was only in 2013, when I agreed to do a botanical survey of the Williams lake Backlands, that I really got to know it. Besides the JP/BC barrens. other highlights are the wonderful yellow birch lined stream that runs from Williams Lake to the Royal Yacht Squadron; a large wetland within a set of wetlands that lies at the contact between the Meguma and Granite Rocks, the boulder fields dropped by glaciers as they retreated; the steep, highly folded Meguma rock faces; the "gully" with its tropical like ambience and sounds of water running below the boulders; the boreal landscape afforded by the south shore of Williams Lake; the absolutely iconic Colpitt Lake...

I cite my introduction to the area because I know that most Haligonians are not now familiar with most of the areas I have cited... but like me, could become equally enthusiastic. A couple of years ago I took a local politico on a short hike in the Williams Lake Backlands. He had been a skeptic about the value of the area before going there, but not after!

I hope the Mayor and Council can be equally enthusiastic about the proposal that the Nature Conservancy of Canada and the city of Halifax acquire the Clayton Developments property in the area of Williams and Colpitt Lakes.

Sincerely,

David Patriquin

David Patriquin
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Dalhousie University

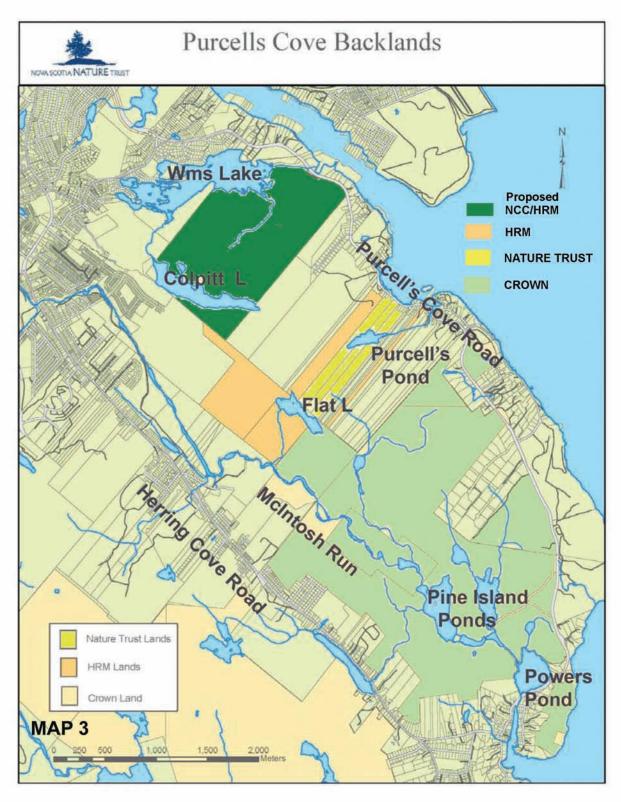
#### Attached

- Map of Protected Lands (with the propsed Clayton property included) and Crown Lands in the Backlands
- Photographs, 2 pages

### Additional Info.

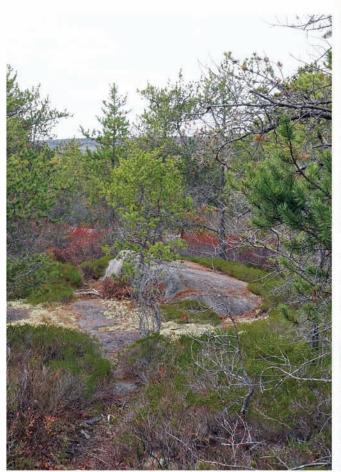
Hill, N.M. and D. Patriquin, 2014. **Ecological Assessment of the Plant Communities of the Williams Lake Backlands**. A REPORT to The Williams Lake Conservation Company, feb 12, 2014. Available at https://dalspace.library.dal.ca/handle/10222/45661

A Rare, Fire-Dependent Pine Barrens at the Wildland-Urban Interface of Halifax, Nova Scotia N. Hill and D. Patriquin. Presentation at Wildland Fire Canada 2014 Conference, Halifax, N.S. Oct 6-9, 2014. Summary & Slides available at http://versicolor.ca/fire/HillPatriquinFireConf.pdf



Protected and Crown Lands in the Backlands, adapted from a 2012 Nature Trust map re: Proposed protection of HRM lands.









Jack Pine/Broom Crowberry barrens on the Clayton property







Top and left: wetlands. Jack Pine in wetland at left Bottom right: The Gully