

## **Correspondence of David Patriquin with Sean Basquill, Ecosystem Scientist with DNR/L&F/NRR regarding occurrence of Broom Crowberry in NS Forest Vegetation Type OW1**

**2013**

Circa Dec 9, 2013

David Patriquin sent an inquiry to Sean Basquill at DNR, inquiring about the description for Nova Scotia Forest Vegetation Type OW1, noting that it cites Black Crowberry as associated with Jack Pine in the OW1 communities ... yet he had observed Broom Crowberry not Black Crowberry to be commonly associated with Jack Pine. (Original e-mail not recoverable)

On 2013-12-10, at 10:32 AM, Basquill, Sean P wrote:

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Hi David,

I have seen Jack pine and Corema together but not very often. Most occurrences are coastal and I found one inland in Cumberland County.

The description for OW1 does include a minor reference to Corema (see vegetation synopsis here: <http://novascotia.ca/natr/forestry/veg-types/ow/ow1.asp>). Most of the OW1 plot data used for the NSFEC do not include that species but it is possible that it was misidentified. I agree, the low shrubs in the type photo from Blandford look like Corema. I have copied Eugene to give him a heads up on this.

I have four coastal plots where jack pine and Corema co-occur. Two sites (Dover and Rocky Lake) are from Bentley and Smith (see <http://dalspace.library.dal.ca:8080/handle/10222/13554>). I have the raw data from Bentley's thesis. There is an IBP plot from Hollahan Lake and a NSFEC plot from Purcell's Cove. I would speculate that the Corema expression of OW1 may be found as far west as the Aspotogan peninsula and east to Canso.

The NSFEC did not employ grey literature, so these external plot data (outlined in previous paragraph ) are not included in the type description. In the Maritimes component of the CNVC (<http://cnvc-cnvc.ca/>), I recognized a Corema conradii subassociation for this unit.

That classification is not complete because we are awaiting the outcome cross-border analyses with Quebec, Ontario, and Newfoundland. However, upon its completion, the NSFEC will remain the authoritative provincial forest classification for NS.

In Nova Scotia, we will distinguish coastal Corema conradii heathland from coastal Empetrum spp. heathland (in the incipient non-forested classification). We will employ analytical outputs from Katie Porter's thesis to help inform that part of the classfn.

Coastal heathlands and woodlands with Corema conradii are globally rare. I believe there is one coastal jack pine woodland plot from Maine. They have classified it with their Pitch Pine woodland (see <http://www.maine.gov/dacf/mnap/features/communities/pitchpinewoodland.htm>).

Corema is not mentioned in their coastal heath description (<http://www.maine.gov/dacf/mnap/features/communities/crowberrybayberry.htm>). The community ecologist in Maine is Andy Cutko (copied). He can verify my memory of their treatment.

Hope this helps.

Sean P. Basquill Provincial Biologist, Ecosystems and Habitats

Attached: SOC\_organic\_2.pdf

C. Fox & C. Tornocai. 2011. [Organic soils of Canada: Part 2. Upland Organic soils](#). Can. J. Soil Sci. 91: 823842.

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## 2015

From: David Patriquin [mailto:davidgpatriquin] Sent: Wednesday, December 09, 2015 10:03 AM To: Basquill, Sean P

Subject: Corema at Deep Cove/Blandford

Hi Sean,

I was able to look fairly extensively at "crowberry" in the Deep Cove/Blandford nature reserves recently. There was a lot Corema, but no Empetrum.

Some photos at

<https://goo.gl/photos/jkqbYRsmnMpC94HM6>

- David P

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RE: Corema at Deep Cove/Blandford

From: Basquill,SeanP(sean.basquill@novascotia.ca) To: davidgpatriquin Date: Wednesday, December 9, 2015 at 02:25 p.m. AST

Hi David,

Thank you very much for sharing this information. Did you by any chance collect waypoints for the Jack Pine dominated woodland and/or the Corema occurrences? These data would be useful for conservation status ranking, targets for future field surveys, and more general biodiversity monitoring.

I spoke to Eugene Quigley and Peter Neily about the vegetation description for unit OW1 in our provincial forest ecosystem classification. This is our coastal jack pine rocky outcrop woodland. Empetrum nigrum was listed as a frequent (dwarf) woody shrub and Corema wasn't listed. After our discussion, they reviewed our raw plot data and made some changes. If Empetrum and Corema were both listed within a given plot, they left the data as is. If only Empetrum was listed, local botanical survey data and (especially) photographs taken during FEC sampling were referred to as a basis for changing the Empetrum records to Corema. These changes have been made and most plots now include Corema. The unit summary will need to change in subsequent re-prints of the provincial guide. I've passed the changes along to my contacts with the national classification (<http://cnvc-cnvc.ca/>). That unit is not posted on the CNVC website, but it will be eventually.

On a general note, I have found that coastal Corema occurrences are found on drier sites than Empetrum. The latter species is not as tolerant of thin stony soils and sites with high levels of exposed bedrock. Although rock outcrops and stony glacial deposits are common in areas with Empetrum, these sites also include a significant accumulation of upland peat. In Canada, upland peat is especially well developed in cool humid coastal areas (see attached paper).

Thanks for your interest...

Sean

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## 2022

David Patriquin To:Sean.basquill@novascotia.ca  
Cc:fernhill  
Tue, Apr 5, 2022 at 8:49 a.m.

Hi Sean

I was trying to find info about the CNVC, specifically in relation to " Association A301 Pinus banksiana/Gaylussacia baccata-Empetrum nigrum/Sibbaldiosis tridentate/Cladina spp. Woodland (Jack Pine/Black Huckleberry Black Crowberry/Three-toothed cinquefoil/reindeer Lichen Woodland)...o Subassociation A301b Corema conradii" which I had some correspondence with you about a few years back in relation to the study of the Backlands conducted by myself and Nick.

'Not able to find anything in the public domain.... is it actually available or otherwise recognized somewhere?

Any comments appreciated.

Thx & Regards

- David P

David G Patriquin

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On Friday, April 8, 2022, 02:34:44 p.m. ADT, Basquill, Sean P wrote: Hi David, That unit was confirmed as a national association. The CNVC code is CNVC00203 but there is no fact-sheet. Its Canadian distribution is limited to Nova Scotia and to one occurrence near Sussex New Brunswick. I have seen the same community in Maine near Eagle Hill.

The CNVC is no longer being led by CFS. Without that support, the initiative has stalled. I am still on the technical committee. There have been proposals to revive it, although it's unclear whether that will happen.

Later this calendar year there will be an updated version of NS Forest Ecosystem classification. This unit was retained in the update and the unit code is still OW1. We now have data from 14 plots.

That's all I have at this point. Hope this helps.

Sean

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On Apr 8, 2022, at 4:17 PM, David Patriquin wrote:

Thx Sean.

BTW, The photo shown under OW1 now for Blandford is of broom crowberry, not black- I have been that area a few times.

David G Patriquin

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On Friday, April 8, 2022, 04:28:21 p.m. ADT, Basquill, Sean P wrote:

Thanks David. Yes, I told them about that but it didn't make through on time. Corema is present in >2/3 plots while Empetrum is only there closer to the coast (~ 1/4 of plots).

Sean

David Patriquin Fri, Apr 8, 2022 at 4:37 p.m  
To: Basquill, Sean P

I have reported it previously, repeated in the 2017 ELC book p. 34. as well.