

Munro caps

General Subdivisions of the
Lists of Plants of the
Pre-Carboniferous of Canada

(1 Erian) caps & sm. caps. Bg.
(This list includes also species from Maine and New York)

6. Revised List of the Pre-Carboniferous Plants of N. E. America, showing their Geological and Geographical Distribution.

NAMES OF SPECIES.	Upper Silurian.	Lower Devn.	Middle Devonian.		Upper Devonian.		Carboniferous.
	Gaspé.	Gaspé.	Gaspé & New York & c.	New Brunswick.	Gaspé & New York & c. †	Maine.	Lower Middle and Upper.
<i>Syringoxylon mirabile</i> , Dawson							
<i>Dadoxylon Ouangondianum</i> , Dn.							
<i>D. halli</i> , Dn.							
<i>D. Newberryi</i> , Dn.							
<i>Orinoxylon Erianum</i> , Dn.			*				
<i>Pectonites Logani</i> , Dn.			*				
<i>Nematoxylon crassum</i> , Dn.			*				
<i>N. tenue</i> , Dn.			*				
<i>Aporoxylon</i>			*				
<i>Sternbergia</i>			*				
<i>Sigillaria palpebra</i> , Dn.			*				
<i>S. Vanuxemi</i> , Goeppert			*				
<i>S. simplicifolia</i> , Vanuxem.			*				
<i>Syringodendron gracile</i> , Dn.			*				
<i>Stigmaria exigua</i> , Dn.			*				
<i>S. pusilla</i> , Dn.			*				
<i>S. perlata</i> , Dn.			*				
<i>S. areolata</i> , Dn.			*				
<i>S. minutissima</i> , Dn.			*				
<i>Didymophyllum reniforme</i> , Dn.			*				
<i>Cyperites</i> sp.			*				
<i>Calamodendron antiquius</i> , Dn.			*				
<i>C. tenuistriatum</i> , Dn.			*				
<i>Calamites cannaeformis</i> , Bt.			*				
<i>C. inornatus</i> , Dn.			*				
<i>C. transitionis</i> , Goept			*				
<i>C. sp.</i>			*				
<i>Anarthrocanna Perryana</i> , Dn.			*				
<i>Asterophyllites parvula</i> , Dn.			*				
<i>A. latifolia</i> , Dn.			*				
<i>A. acicularis</i> , Dn.			*				
<i>A. scutigera</i> , Dn.			*				
<i>A. lenta</i> , Dn.			*				
<i>Annularia laxa</i> , Dn.			*				
<i>Sphenophyllum antiquum</i> , Dn.			*				
<i>Pinnularia dispalans</i> , Dn.			*				
<i>P. elongata</i> , Dn.			*				
<i>P. nodosa</i> , Dn.			*				
<i>Lepidodendron Gaspianum</i> , Dn.			*				
<i>L. Chemungense</i> , Dn.			*				
<i>L. corrugatum</i> , Dn.			*				
<i>L. primævum</i> .			*				
<i>Leptophleum rhombicum</i> , Dn.			*				
<i>Lepidophloios antiquus</i> .			*				
<i>Psilophyton princeps</i> , Dn.			*				
<i>P. robustius</i> , Dn.			*				
<i>P. elegans</i> , Dn.			*				
<i>P. glabrum</i> , Dn.			*				
<i>Arthrostroma gracile</i> , Dn.			*				
<i>Cyclostigma densifolium</i> , Dn.			*				
<i>Cordaites Robbii</i> , Dn.			*				
<i>C. angustifolia</i> , Dn.			*				
<i>C. sp.</i>			*				
<i>C. sp.</i>			*				
<i>C. flexuosus</i> , Dn.			*				
<i>Cyclonema Jacksoni</i> , Dn.			*				
<i>C. Halliana</i> , Goeppert			*				
<i>C. Rogersi</i> , Dn.			*				
<i>C. valida</i> , Dn.			*				
<i>C. obtusa</i> , Lesq.			*				
<i>C. Boeckshii</i> , Goeppert			*				
<i>C. Brownii</i> , Dn.			*				
<i>C. varia</i> , Dn.			*				
<i>C. problematica</i> , Dn.			*				
<i>Neuropteris polymorpha</i> , Dn.			*				
<i>N. serrulata</i> , Dn.			*				

stet

Nematophyton

Nematoxylon

Lycopodium Richardsonii Dn
L. Malthusii Dn
L. Canadense Dn
Cladophyton mirabile, Lesq

n/

Archaeopteris

A. Gaspensis Dn

Cyclopteris

(Platyphyllum)

† Including Ohio, Pennsylvania and Ontario.

(over)

Muron
caps

General Subdivisions of the
The Lists of Plants of the
Pulucarsoie of Canada

(1. Erian) caps & sm. caps. Bg.
(This list includes also species from Maine
and New York)

Revised List—(Continued.)

NAMES OF SPECIES.	Upper Silurian.	Lower Devn.	Middle Devonian.		Upper Devonian.			Carboniferous.	
	Gaspé.	Gaspé.	Gaspé.	New York, &c.†	New Brunswick.	Gaspé.	New York, &c.†	Maine.	Lower Middle and Upper.
Neuropteris Selwyni, Dn.									
N. Crassa, Dn.									
N. resecta, Dn.									
N. new species, Dn.									
N. Dawsoni, Hartt.									
Sphenopteris Hoeninghausi, Brong.	X								
S. marginata, Dn.									
S. Hartii, Dn.									
S. Hitchcockiana, Dn.									
S. recurva, Dn.									
S. splendens, Dn.									
Hymenophyllites curtilobus, Dn.									
H. subfurcatus, Dn.									
H. Gersdorffii, Goepf.									
H. obtusilobus, Goepf.									
H. Hildrethi, Lesq.									
Alethopteris discrepans, Dn.									
A. ingens, Dn.									
A. Perleyi, Hartt.									
Pecopteris serrulata, Dn.									
P. obscura, Dn.									
P. preciosa, Hartt.									
P. densifolia, Dn.									
Trichomanites sp., Dn.									
Caulopteris Lockwoodi, Dn.									
antiqua, Newberry									
Protopteris peregrina, Ny. sp.									
Rhachiopteris pinnata, Dn.									
R. cyclopteroides, Dn.									
R. punctata, Dn.									
R. striata, Dn.									
R. tenuistriata, Dn.									
R. gigantea, Dn.									
R. palmata, Dn.									
R. sp.									
Psaronius Erianus, Dn.									
P. textilis, Dn.									
Cardiocarpum cornutum, Dn.									
C. Baileyi, Hartt.									
C. Crampii, Hartt.									
C. ovale, Dn.									
C. obliquum, Dn.									
Trigonocarpum racemosum, Dn.									
T. perantiquum, Dn.									
Carpolithes siliqua, Dn.									
C. spicatus, Dn.									
C. lunatus, Dn.									
C. compactus, Dn.									
Antholithes Devonius, Dn.									
A. floridus, Dn.									
Sporangites Huronensis, Dn.									
Sporangites acuminata, Dn.									

Odontopteris squamosa Dn
Cardiopteris mana Dn

(Protosalomia)

Ptilophyton varrucanii, Dn

2. Lamin Caribaeensis,)
Horton Series,)

Bg caps of
 on caps

Dactylozoum (Palaeozoum) antiquum Des X

Sigillaria?

Lepidodendron Carinatum, Des

L. Stenbergi, Brongt

L. tetragonum, Stenb.

L. aculeatum, Stenb.

Diplotegium, Br

Lycopodium (Ptilophyton) plumula

Cardaites brassifolia, Brong

Cydepterus (Acrodictes) aculeata, Des

Hymenophyllum, Br

Cardiovascularium, Br

Pinnularia Classa, Des

3. Muller's list

- Dadoxylon* (*Palaeoxylon*) *acadianum* Du
Syillaria, sp
Calamites *Cisti*, Brongt
C. Canuaeformis, Brongt
C. undulatus, Brongt,
Lepidodendron aculeatum, Stenb.
L. radiato-plicatum, Du
L. Selaginoides, Stenb.,
Lepidophloios acadianus Du
Cardaites brachyfolia, Ung
Adiantopteris antiqua, Du
Cardiopteris, sp
Metaphylon *Trichitum*, Brongt
Receptaria abbreviata, Brongt
Hymenophyllum furcatus, Brongt
Sphenopteris obtusiloba, Brongt
S. Hoenenhausi, Brongt,
Palaeopteris, sp.

333

~~IV. PLANTS OF THE MIDDLE AND UPPER COAL-FORMATION.~~

These have already been illustrated in some detail in my memoir of 1866 already referred to, and in Acadian Geology; and though much new material has accumulated and many species have been inadequately figured, it may be some time before any full illustration of these plants can be attempted. For this reason, I give here a list of the species recognised in these groups of strata.

To avoid repetition of references, I may state that the new species established by Bunbury will be found in his papers in the Journal of the Geological Society, Vols. III and VIII. Those established by myself will be found in my paper in the same Journal, Vol. XXII, and my Acadian Geology, 2nd edition, 1868.

4. MIDDLE COAL-FORMATION, NOVA SCOTIA AND NEW BRUNSWICK.




















- Dadoxylon Acadianum, Dawson.
- ~~D. annulatum, Dawson.~~
- Sigillaria (Favularia) elegans, Brongniart.
- (Fav.) tessellata, Brongniart.
- (Rh.) Schlotheimiana, Brongniart.
- (Rh.) Saullii, Brongniart.
- Brownii, Dawson.
- reniformis, Brongniart.
- laevigata, Brongniart.
- catenoides, Dawson.
- striata, Dawson.
- (Clathraria) Menardi, Brongniart.
- (Asolanus) Sydnensis, Dawson.
- organum, Lindley & Hutton.
- elongata, Brongniart.
- flexuosa, L. & H.
- pachyderma, L. & H.
- (Fav.) Bretonensis, Dawson.
- eminens, Dawson.
- Dournaisii, Brongniart.
- Knorrii, Brongniart.
- Stigmaria ficoides, Brongniart.
- Antholites Rhabdocarpi, Dawson.
- pygmaea, Dawson.
- Trigonocarpum Hookeri, Dawson.
- Sigillaria, Dawson.
- intermedium, Dawson.
- avellanum, Dawson.
- minus, Dawson.

(over)

CANADIAN FOSSILS.

- T. ~~uv~~ rotundum, Dawson.
- Rhabdocarpus — ?
- Calamites cannaeformis, Brongniart
- C. ramosus, Artis.
- C. Voltzii, Brongniart
- C. Nova-Scotica, Dawson.
- C. nodosus, Schloth.
- Equisetites curta, Dawson.
- Asterophyllites foliosa, L. & H.
- A. grandis? Sternberg,
- A. trinervis, Dawson.
- Sphenophyllum emarginatum, Brongniart
- S. saxifragifolium, Sternberg.
- S. Schlotheimii, Brongniart
- S. erosum, L. & H.
- Pinnularia capillacea, L. & H.
- P. ramosissima, Dawson.
- Noeggerathia dispar, Dawson.
- N. flabellata, L. & H.
- Cyclopteris (Neuropteris) obliqua, Brongniart
- C. (? Neuropteris) ingens, L. & H.
- C. oblata, L. & H.
- C. fimbriata, Lesquereux.
- C. hispida, Dawson.
- Neuropteris rarinervis, Bunbury.
- N. perelegans, Dawson.
- N. Voltzii, Brongniart
- N. flexuosa, Sternberg.
- N. Loshii, Brongniart
- N. acutifolia, Brongniart
- N. conjugata, Goepfert.
- N. attenuata, L. & H.
- N. dentata, Lesq.
- N. Soretii (Brongniart)
- N. cyclopteroides, Dawson.
- Odontopteris subcuneata, Bunbury.
- Dictyopteris obliqua, Bunbury.
- Lonchopteris tenuis, Dawson.
- Sphenopteris munda, Dawson.
- S. decipiens, Lesquereux.
- S. gracilis, Brongniart
- S. artemisiæfolia, Brongniart
- Sphenopteris Canadensis, Dawson.
- S. Lesquereuxii, Newberry.
- S. microloba, Guttbier.
- S. obtusiloba (?), Brongniart
- Phyllopteris antiqua, Dawson.
- Alethopteris Grandini, Brongniart
- A. pteroides, Brongniart
- A. Serlii, Brongniart
- A. grandis, Dawson.
- Pecopteris abbreviata, Brongniart
- P. plumosa, Brongniart
- P. polymorpha, Brongniart

5 UPPER COAL FORMATION, NOVA SCOTIA, NEW BRUNSWICK AND PRINCE EDWARD ISLAND.

- Dadoxylon materiarium*, Dawson.
Walchia (*Araucarites*) *gracilis*, Dawson.
Walchia (*Araucarites*) *robusta*, Dawson.
Sigillaria (*Rhytidolepis*) *scutellata*, Brongt.
Calamodendron approximatum, Brongt.
Antholithes squamosa, Dawson.
Rhabdocarpus insignis, Dawson.
Trigonocarpum Noeggerathii, Brongt.
Calamites Suckovii, Brongt.
C. C. C.  *Cistii*, Brongt.
C. C. C.  *dubius*, Artis.
C. C. C.  *gigas*, Brongt.
Asterophyllites equisetiformis, L. & H.
Annularia sphenophylloides, Zenker.
A.  *longifolia*, Brongt.
Sphenophyllum longifolium, Germar.
C.  *Cyclopteris heterophylla*, Goepert.
C.  *oblongifolia*, Goepert.
Neuropteris cordata, Brongt. (and var. *angustifolia*).
N.  *gigantea*, Sternb.
N.  *heterophylla*, Brongt.
N.  *auriculata*, Brongt.
N.  *rarinervis*, Bunbury.
Odontopteris Schlotheimii, Brongt.
S.  *Sphenopteris hymenophylloides*, Brongt.
S.  *latior*, Dawson.
Alethopteris lonchitica, Sternberg.
A.  *nervosa*, Brongt.
A.  *muricata*, Brongt.
Pecopteris arborescens, Schloth.
P.  *rigida*, Dawson.
P.  *unita*, Brongt.
P.  *oreopteroides* (?), Brongt.
Beinertia Goeperti, Dawson.
Palaeopteris Acadica, Dawson.
Lepidodendron undulatum, Sternberg.
Lepidophyllum lanceolatum, L. & H.
L.  *trinerve* (?), L. & H.
L.  sp.
Lepidophloios parvus, Dawson.
Cordaites simplex, Dawson.

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To this last list it is possible that a few species may be added from my more recent collections, in Pictou County.

Of the above species those which may be regarded as the most characteristic of the Newer Coal-formation, as distinguished from other members of the Carboniferous system, are perhaps *Dadoxylon materiarium*, the species of *Walchia*, *Annularia sphenophylloides*, *Neuropteris auriculata*, *Pecopteris arborescens*, and *Cordaites simplex*. *Calamites gigas* is found only in the newest beds of the Upper Coal-formation.

335
Mun. cap
* Several stages
of the

Lists of the more Common Fossil Plants
occurring in the Carboniferous Formation
of Great Britain.
Scotland

B. cap & Mun. cap
(Calcareous Sandstone Series)*
Chondrites plumosa Kidston
" *simplex* "
Bythotrephes scotica Kidst
* Culm Series Germany. Hunter Series Nova Scotia

B. cap
(Equisetaceae)
Asterocalamites Schimper
A. radiata

B. cap
(? Rhizocarpeae)
Sphenophyllum tenerrimum. Ett sp

B. cap
(Filicaceae)
Sphenopteris Brongt.
S. crassa L & H.
S. hibberti L & H.
S. excelsa L & H
S. Ettingshauseni (Sterb) Ett sp.
S. Machanekii Ett sp
S. moravica Ett sp
S. elegans Brongt.
S. decomposita Kidston
S. distans Sterb
S. subgenicula Sterb sp.

Calymnotheca Sterb
X *C. affinis* L & H sp Sph affinis L & H, *S. lanceata* Brongt
C. bifida L & H sp Sph bifida L & H.

Sphenopteridium Schimper

S. dissectum Göpp sp.

336

8

Rhacopteris, Schimper

R. lindseaeformis Beunberg sp. Adopteris lindseaeformis
Beunberg

R. Geckii, Kidston sp.

R. Macconochie Kidst sp

R. flabellata Late sp

Cyclopteris

C. nana

Caulopteris

C. minuta Kidst.

Bromops (Lycopodiaceae)

Lepidodendron, Sternb.

L. Veltheimianum, Sternb.

L. Volkmannianum

Sigillaria Brongt.

S. Taylori Carr sp (Wood. Taylori, Cunningham)

S. Wickiana, Heer, sp. (Lep. Wickiana
Heer, Beunberg)

Lepidophloios, Sternb

L. Scoticus Kidst = (L. lucensis
not Beunberg)

Lepidostrobus Brongt.

L. variabilis L. & H

L. comosus. L. & H. 337

9

L. fimbriatus. Kidston

W

Cycadaceae) Am. sp. B.

Stigmaria ficoides

Cordaites. Unger

Cordaites sp. (Probably C. palmaceiformis Greville)

B. small

(Fruit of uncertain affinity)

Carpolithes. Sternb.

C. sulcatus. L. & H.

B. caps & am caps

Carboniferous Limestone Series

B. am caps

Algae

Spirophyton. Hall

S. cauda galli. Vanuxem sp

Equisetaceae

Asterocalamites. Schimper

A. radiata. Brongt sp.

Filicaceae

Sphenopteris. Brongt.

S. Gersdorfi Göpp. sp.

S. Linkii. Göpp sp

S. dicksonioides. Göpp. sp.

S. elegans. Brongt.

Cyclopteris. Brongt.

C. nana. Eichwald.

Rhacopteris. Schimper

R. Lindseaeformis Beesbury sp

R. transitionis Ett sp.

Neuropteris

N. antecedens. Sternb.

Coal measures.

337

B. m. of (Equisetaceae)
Calamites. Suckow.

C. Suckowii. Brongt.

C. (nodosus) ramosus. Artes.

C. cannaeformis. Schlost.

C. cestii. Brongt.

C. varians. Sternb. (including *C. cruentus*)

Calamocladus. Schimper

C. equisetiformis. Schl. sp.

C. grandis. Sternb. sp.

Annularia. Sternberg.

A. radiata. Brongt. = *Art. foliosum* L & H.

(? Rhizocarpeae)

Sphenophyllum. Brongniart.

S. erocum. L & H.

" *v. saxifragae-folium*.

" *sp. nullum*. Crépin

Volkmannia. species.

340

2

B. on up (Filicaceae)

Sphenopteris. Brongniart.

S. Hönninghausi. Brongt.

S. obtusiloba. Brongt.

S. Schillingii. Andræ

S. trifoliata. Artes sp.

S. Lobelli. Göpp. sp.

S. furcata. Brongt.

S. dissecta. Brongt.

Urnatopteris. Kidston

U. (Sph) tenella. Brongt. sp.

Renaultea. Leiller

R. (Sph) microcarpa. Lesq^m.

Eremopteris. Schimper

Erem. artemisiæfolia. Sternb sp.

Mariopteris. Leiller

M. latifolia. Brongt. sp = Sphen. lobifolia Brongt.

M. nervosa. Brongt. sp

M. muricata. Schloth. sp

Dactylothea. Leiller.

D. plumosa. Artis sp. (= *Pscept. plumosa*)

Alethopteris. Sternberg

A. longitica. Sternb.

Neuropteris: Brongt.

N. heterophylla. Brongt - *N. Lohii* &
N. Soretii, Brongt

N. tenuifolia. Schöth. sp

N. gigantea. Sternb

(*Lycopodiaceae*.)

Lepidodendron. Sternberg.

L. Sternbergii. Brongt (including *L. fragile* L & H

" " *L. obovatum*. (only variety of last)

" *aculeatum*. Sternb.

Sigillaria. Brongt

S. tessellata. Brongt

S. pachyderma "

S. elliptica "

S. rotata "

S. laevigata "

S. discophorum. König. sp. (Probably a *Lepidophloios*)

S. minutifolia. Boulay. sp.

Lepidophloios. Sternb.

L. cardinatus. Weiss. 342

Lepidostrobos. Brongt.

L. variabilis. L & H.

L. Geinitzii. Schimper

Stigmaria. Brongt.

S. ficoides. Brongt (x var. *reticulata*)

S. stellata. Göpp

(Cycadaceae)

Cordaites. Unger

C. principalis. Gernar. Simila to *C. simplex* Dr

Cardiocarpon. Brongt.

C. Lindleyi. Carr.

Trigonocarpon. Brongt.

T. Parkinsoni. Brongt. = *T. Noegguathi*, L & H

T. ovatum.

Carpolithes. Sternb

C. alata. L & H. (probably same with *L. Parkinsoni*)

Pal plants

L. cordata. Water

L. pinnatifida. Brought.

L. pinnatifida. 24.

L. pinnatifida. 24.

L. pinnatifida. Brought

L. pinnatifida. Brought (x 100. reticulata)

L. pinnatifida. 24.

L. pinnatifida

L. pinnatifida. Brought

L. pinnatifida. Brought

L. pinnatifida. Brought

L. pinnatifida. 24.

L. pinnatifida. Brought

L. pinnatifida. Brought = *L. pinnatifida*, 24.

L. pinnatifida

L. pinnatifida. Brought

L. pinnatifida. 24.