A Cultural History of Peat in Ireland

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What is Peat?

A heterogeneous mixture of partially decomposed plant residues that have accumulated in a water-saturated and anoxic environment.
Peatlands in Ireland

Peatlands cover 1.2 million hectares, 17% of the land area.

Raised Bog, midlands region

Blanket Bog, west coast
Mesolithic to Early Christian Period

Post-glacial lakes were infilled by reed-swamp, forming fens and then progressing to raised bogs. Wooden trackways were built to connect areas of dry land.
Peatland Archaeology

Early Christian Single Plank Trackway, 650-685 AD

Neolithic Stone Enclosure, 3880 - 3800 BC

Bronze Age Trackway, 1100 – 900 BC
Early References to Peat Use

- Old Irish law text from the 7th Century: includes fines for the illegal cutting of turf
- Senchas Már, from the 7th/8th Centuries: describes turf cutting
- Aislinge Mheic Con Glinne, a late 11th Century tale: fire made with two sods of turf and some oat chaff
- Anglo-Norman documents from the 13th & 14th Centuries: reference to turbary – the right to cut turf - and the value of turbary
- Late 16th Century Commission: evidence of tenants cutting turf from bogs on the Earl of Ormond’s estates
By the Late Middle Ages

Raised Bogs were dominant in the Irish Midlands landscape

Blanket Bogs on mountains and along the west coast

Clearance of woodland and rise of population in the 17th Century

More extensive use of sod turf cut from the edges of the bogs for fuel

Source: Sadhbh McElveen (in Aalen et al. ‘Atlas of the Irish Rural Landscape’)
Hand-won Sod Turf Production

Cutting sods of turf

Footing – stacking the sods to dry

The easier way

Bringing it home

Sleán
Stacking Turf for the Winter
Selling Turf in a Local Town
Bog Commissioners’ Map - 1810
## Early Peat Entrepreneurs

<table>
<thead>
<tr>
<th>Promoter</th>
<th>Enterprise</th>
<th>Location &amp; Date</th>
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</thead>
<tbody>
<tr>
<td>Charles Wye Williams</td>
<td>Mechanical dewatering</td>
<td>Cappagh, 1844</td>
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<td>Rees Reece</td>
<td>Peat distillation</td>
<td>Kilberry, 1849</td>
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<td>Jasper W. Rogers</td>
<td>Peat charcoal</td>
<td>Derrymullen, 1850</td>
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<tr>
<td>Charles Hodson</td>
<td>Peat briquetting</td>
<td>Derrylea, 1860</td>
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<tr>
<td>McQuaid</td>
<td>Peat litter &amp; board</td>
<td>Umeras, 1890</td>
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<td>W. M. Callender</td>
<td>Peat paper</td>
<td>Celbridge, 1903</td>
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<tr>
<td>Norman Palmer</td>
<td>Peat litter</td>
<td>Drumcooley, 1906</td>
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<tr>
<td>J. B. Bessey</td>
<td>Electro-peat coal</td>
<td>Kilberry, 1906</td>
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<tr>
<td>Count Louis Hamon</td>
<td>Peat briquetting</td>
<td>Bellair, 1917</td>
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<td>John Purser Griffith</td>
<td>Mechanised sod peat</td>
<td>Turraun, 1924</td>
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</table>
National Turf Cutting Competition
War-time Emergency: Turf Camps

Camp for peat workers at Killinthomas, Co. Kildare
TDB - Sports Competitions

Tug-o-war competition at Newbridge, 1945
Social Competition

So! Last night you were an Engineer!
War-time Emergency: Dublin

Sod turf stockpile in the Phoenix Park, Dublin

A cartoon from the Dublin Opinion
The final meeting of the Turf Development Board, early June 1946

Todd Andrews, the first MD of Bord na Móna, is on the left

Bord na Móna was formally established on 21st June 1946
Mechanised Sod Turf Production

An electrically-powered Bagger, which cut and spread the turf
Bord na Móna - fully automated collection of sod turf
1st Generation - Sod Turf Stations

- Gweedore, 5 MW - 1957
- Screeb, 5 MW - 1957
- Milltown Malbay, 5 MW - 1957
- Cahirciveen, 5 MW - 1957
- Lanesborough, 20 MW - 1958
- Allenwood, 40 MW - 1952
- Portarlington, 38 MW, 1950
Bord na Móna Housing Schemes

Aerial view of the housing scheme at Coill Dubh, Co. Kildare
Milled Peat Production

Milling

Harrowing

Harvesting into stockpiles

Ridging
### Types of Peat Fuel

<table>
<thead>
<tr>
<th>Peat Fuel Type</th>
<th>Moisture Content (%)</th>
<th>Calorific Value (GJ/t)</th>
<th>GHG Emissions (tCO$_2$/TJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milled Peat</td>
<td>45 - 55</td>
<td>7.7 – 10.0</td>
<td>116.7</td>
</tr>
<tr>
<td>Sod Turf</td>
<td>30 - 35</td>
<td>12.2 – 13.3</td>
<td>104</td>
</tr>
<tr>
<td>Peat Briquettes</td>
<td>10</td>
<td>17.9</td>
<td>98.9</td>
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</tbody>
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**Images:**
- Milled Peat
- Sod Turf
- Peat Briquettes
**2nd Generation – Milled Peat Stations**

- **Bellacorrick**, 40 MW - 1962
- **Lanesborough**, 85 MW – 1966
- **Shannonbridge**, 125 MW – 1964
- **Rhode**, 80 MW - 1960
- **Ferbane**, 90 MW - 1957
Private Bog Development Scheme

Chain excavator machine

Fieldpress machine

Cutting ‘sausage’ turf

Spreading ‘hopper’ turf
3rd Generation – Fluidised Bed Stations

- Lough Ree, 100 MW CFB – 2004
- West Offaly, 150 MW CFB – 2005
- Edenderry, 128 MW BFB – 2000
Conservation
103 Special Areas of Conservation (SAC)
148 Natural Heritage Areas (NHA)

- Reduction in peat cutting

Carbon
EU Emissions Trading Scheme
EU Effort-Sharing Regulation

- Reduction in peat use
The Future
Thank You