



**THE SOURCE OF GREYWACKE USED IN THE  
PASSAGE TOMBS AT BRÚ NA BÓINNE**

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Mary Corcoran  
1978 - 2007

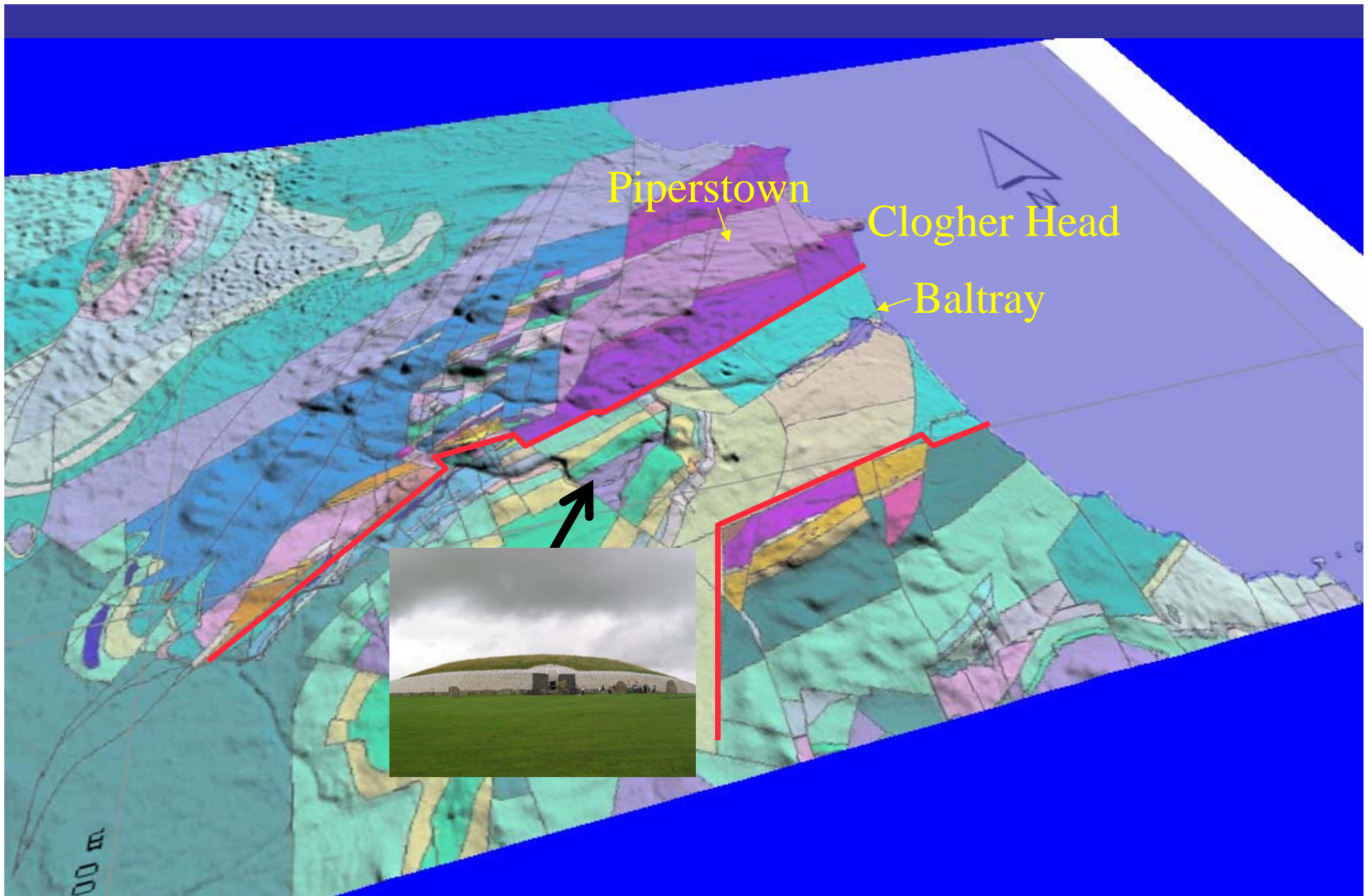


## ACKNOWLEDGEMENTS

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The late Professor Frank Mitchell and Professor George Eogan have supported the project since its inception.



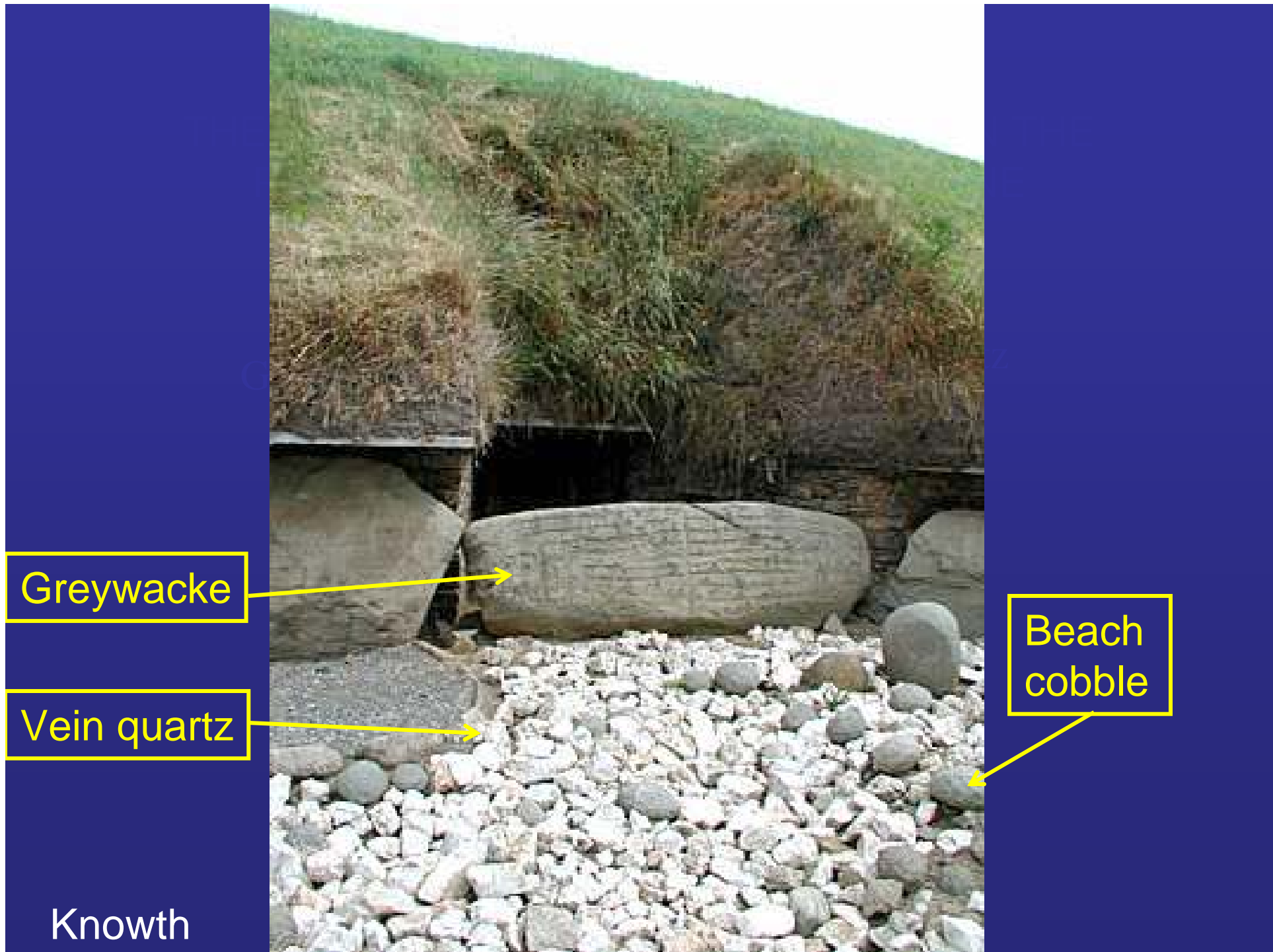
Geology of the Boyne Valley



Greywacke

Vein quartz

Newgrange

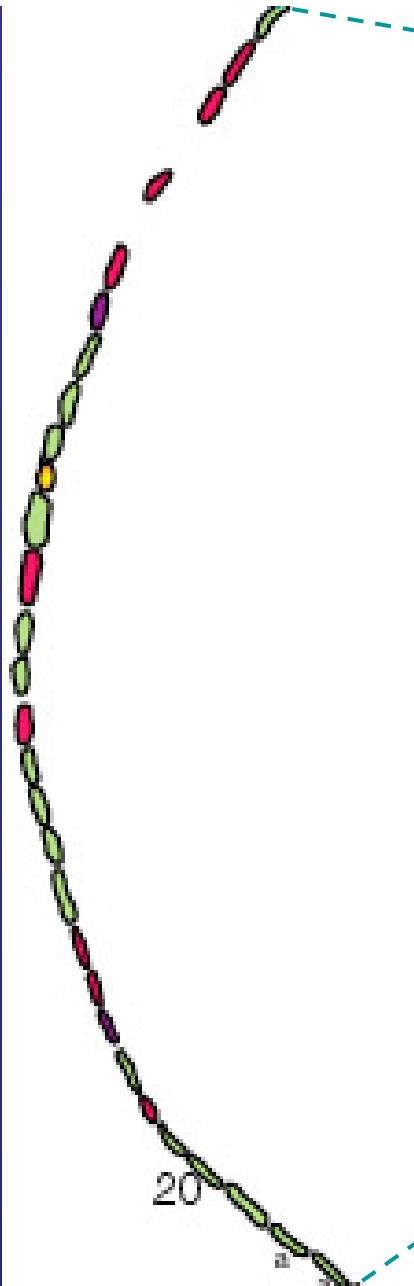


Greywacke

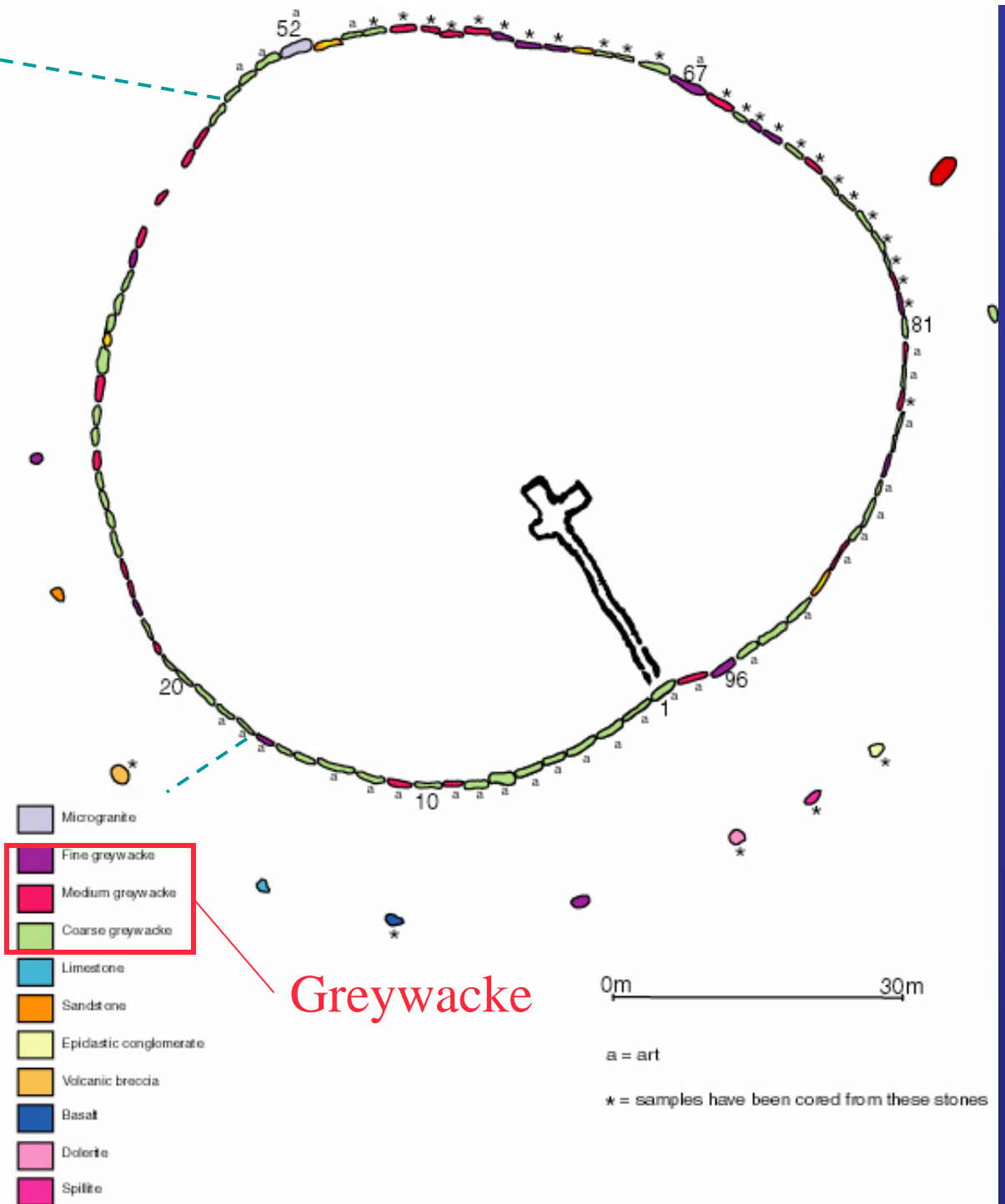
Vein quartz

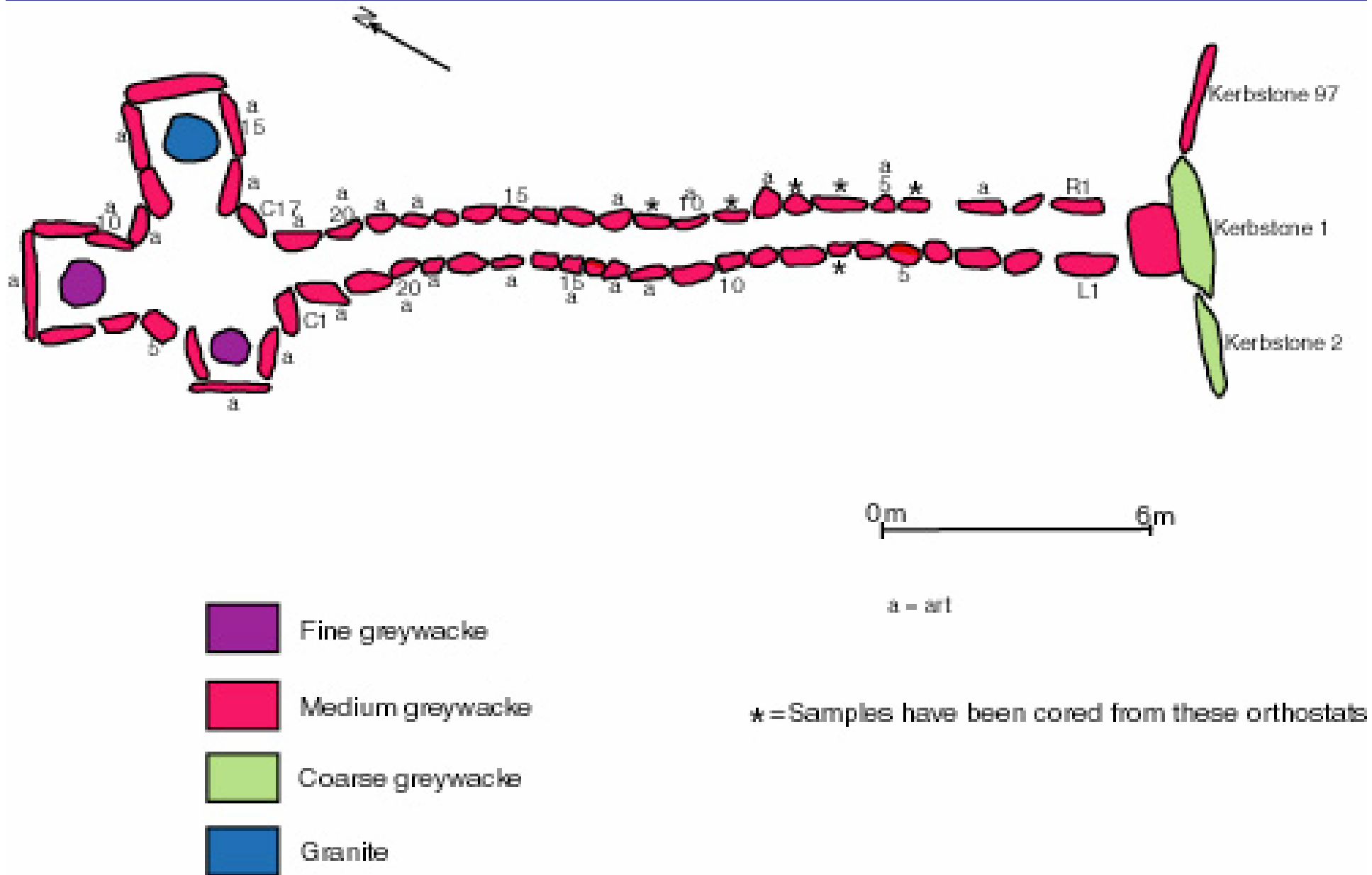
Beach  
cobble

Knowth

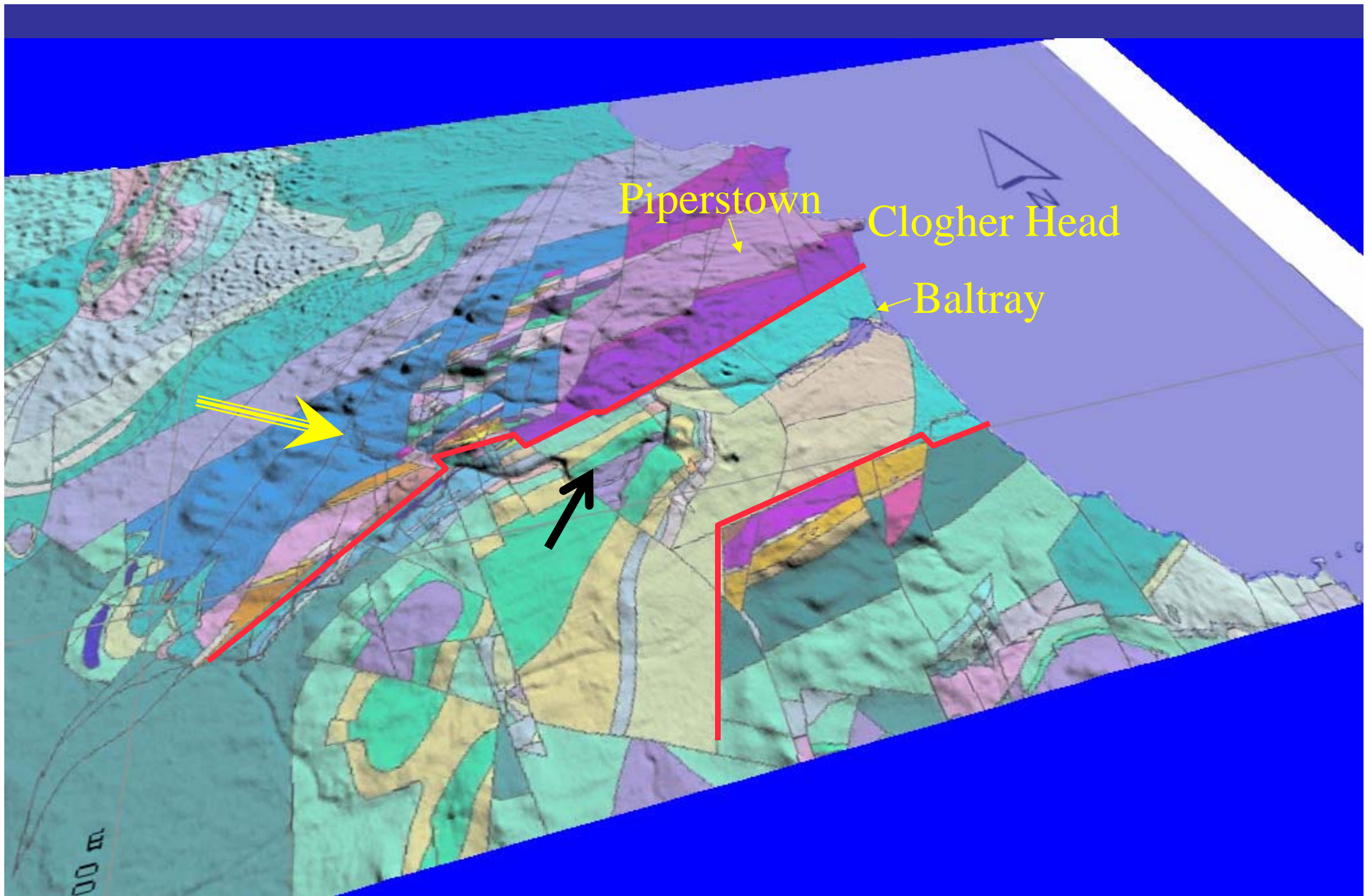


Plan of kerbstones at Newgrange





Plan of orthostats at Newgrange



Source of Greywacke

# METHODOLOGY

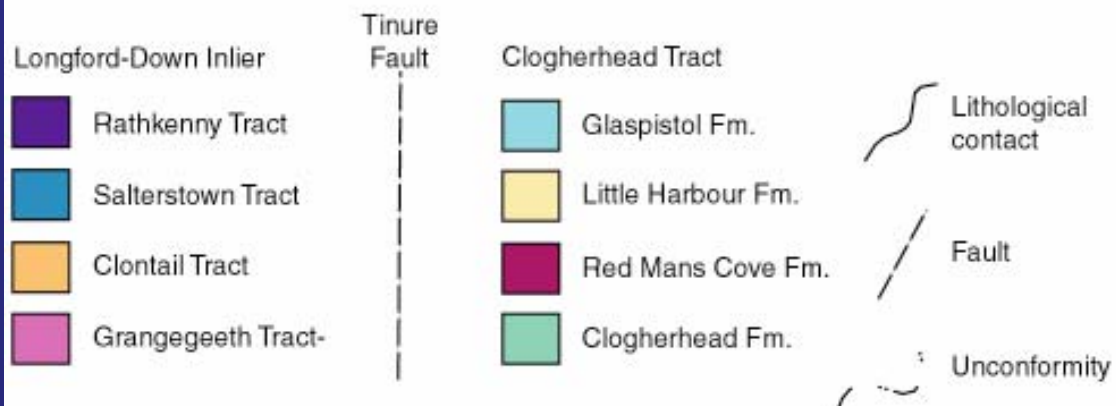
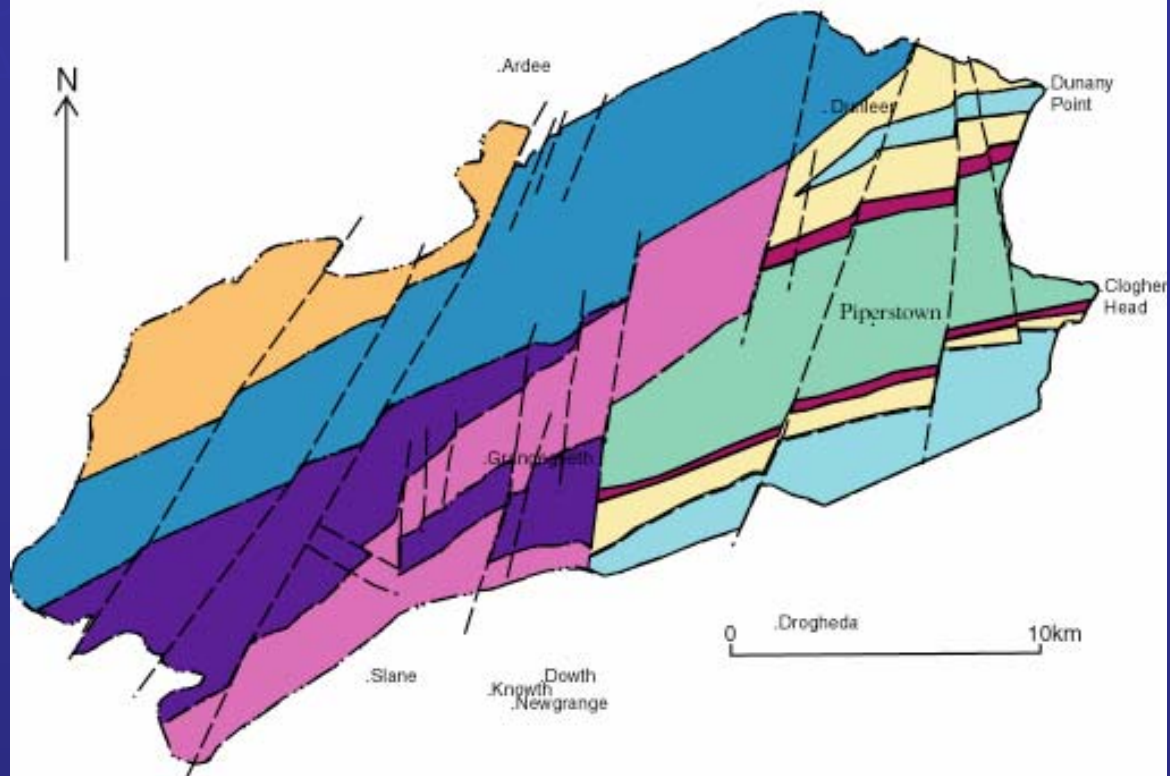
'Hand specimen' observation

Tectonic analysis

Drill samples

- petrography
- geochemistry

# Geology of the Longford Down inlier



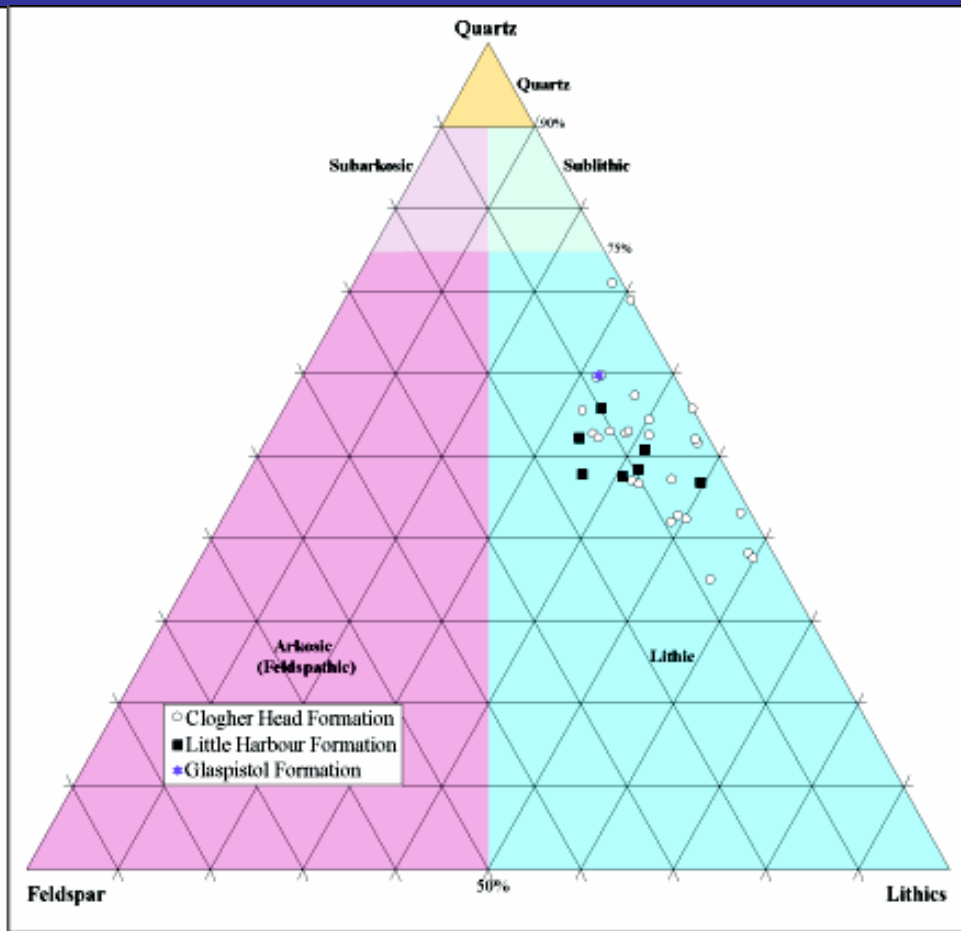
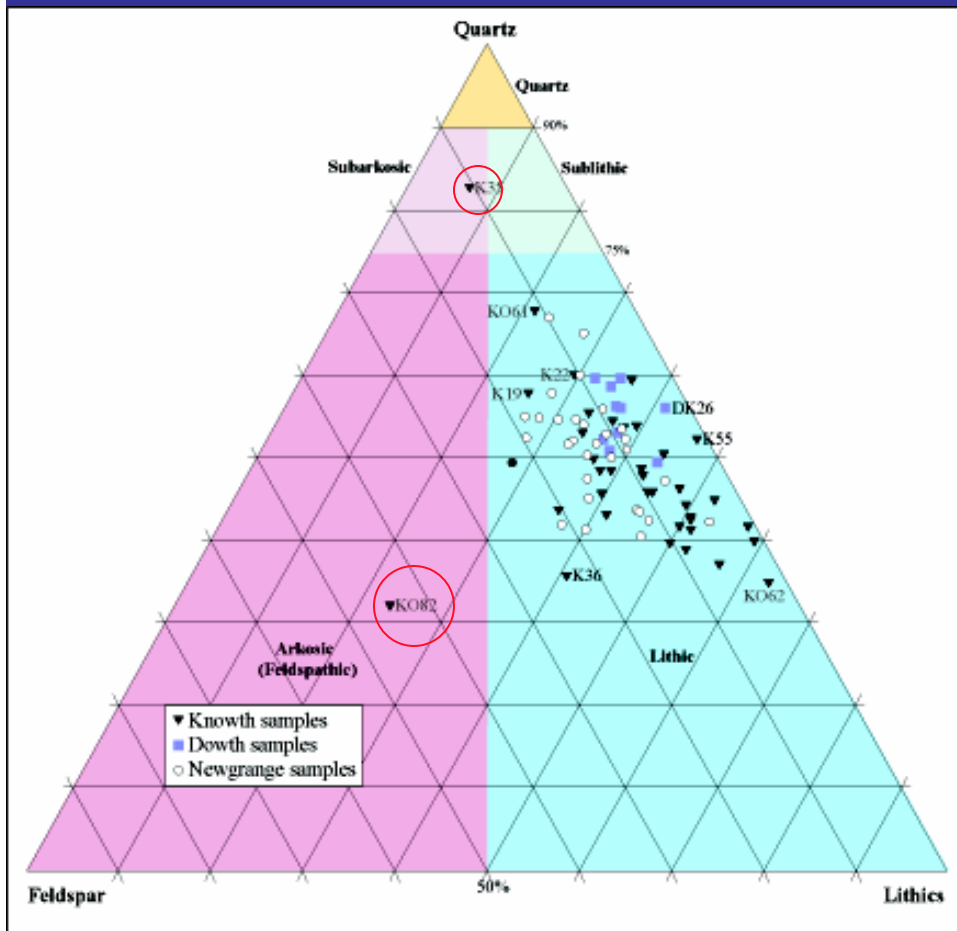
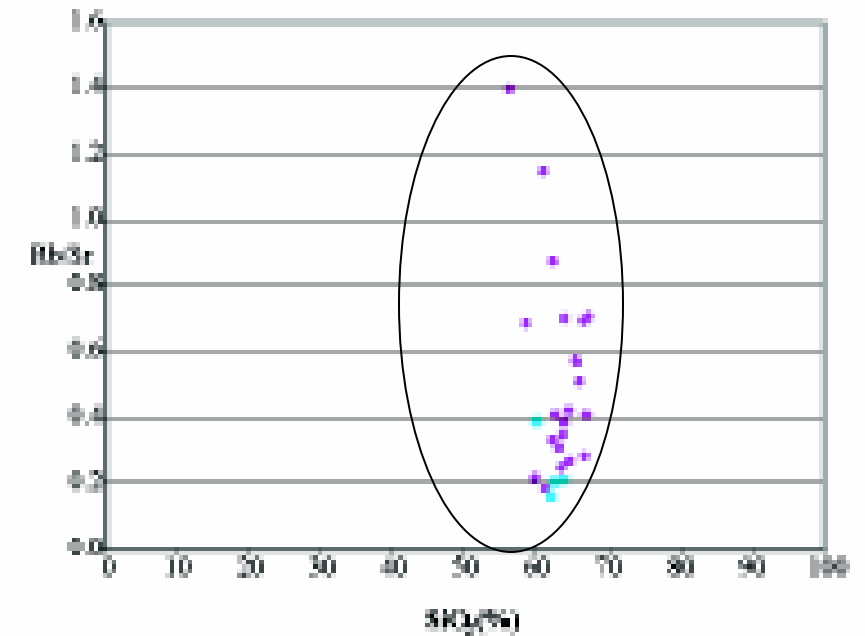
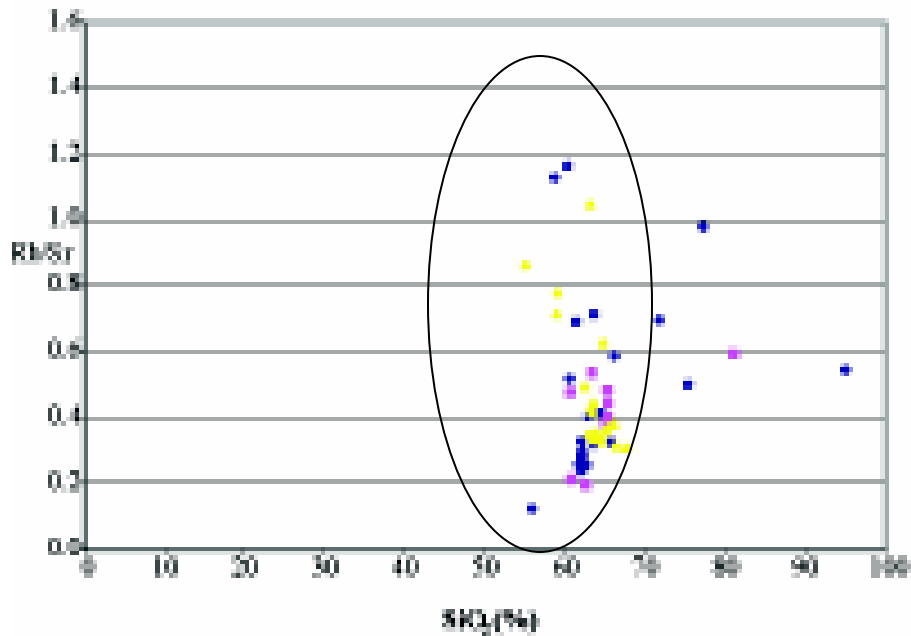
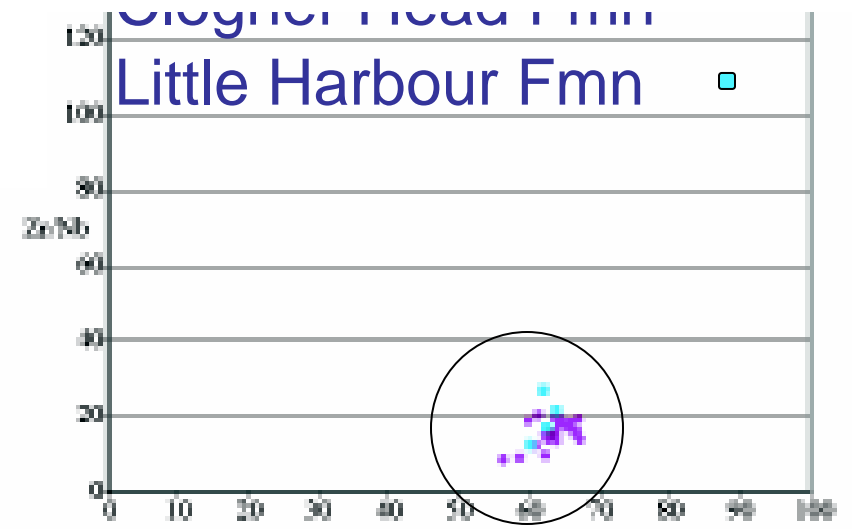
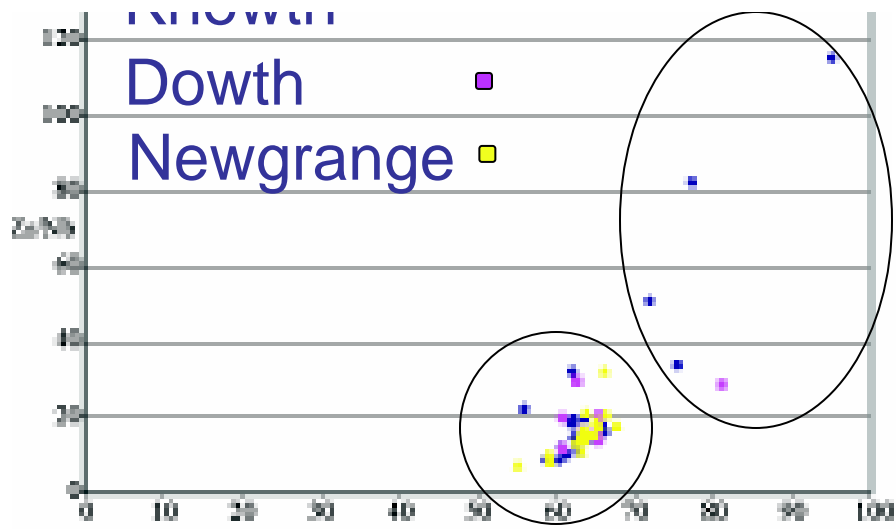
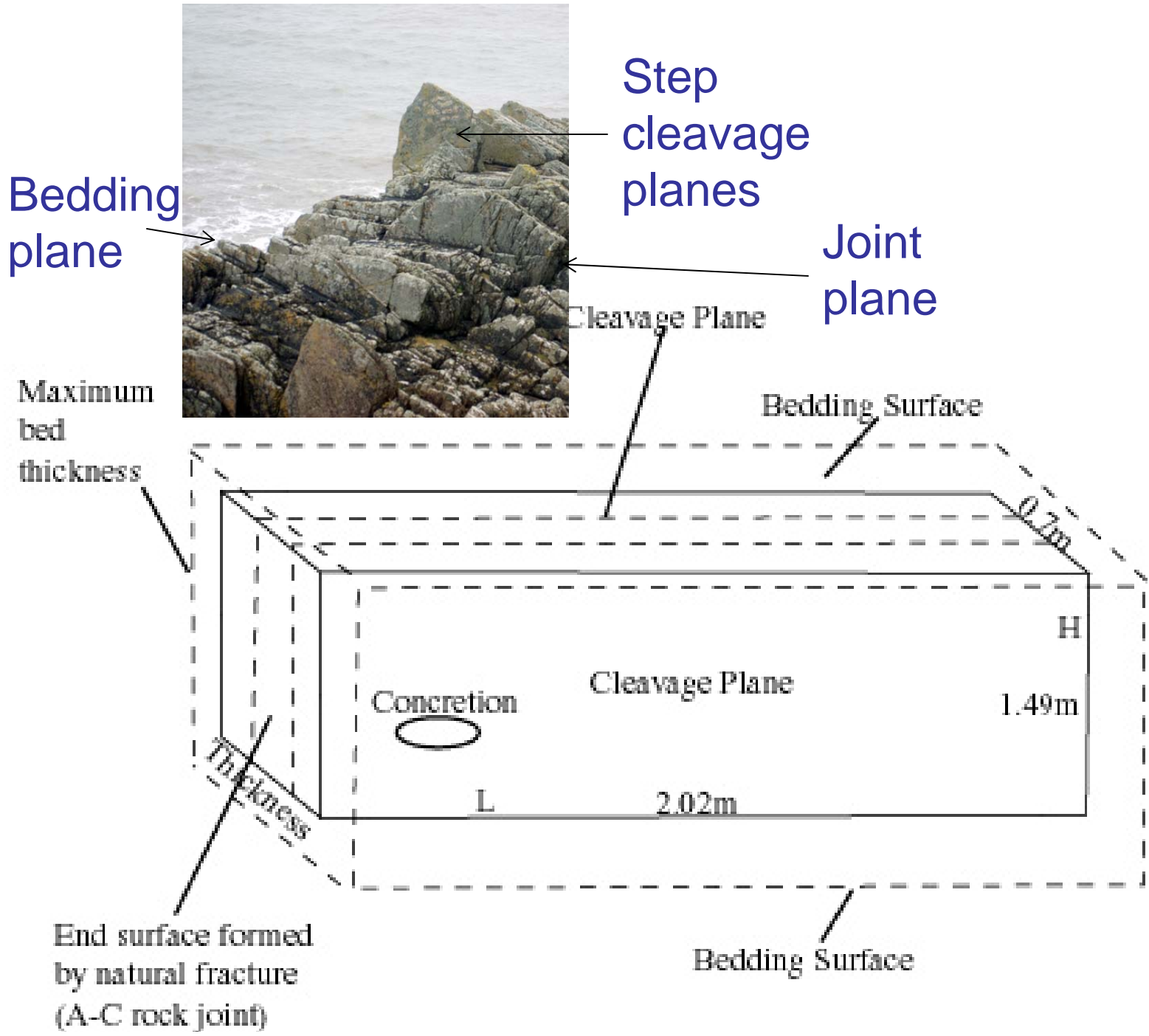


Figure 4.1: QFL (quartz-feldspar-lithic) ternary diagram for greywacke samples from Knowth, Dowth and Newgrange.

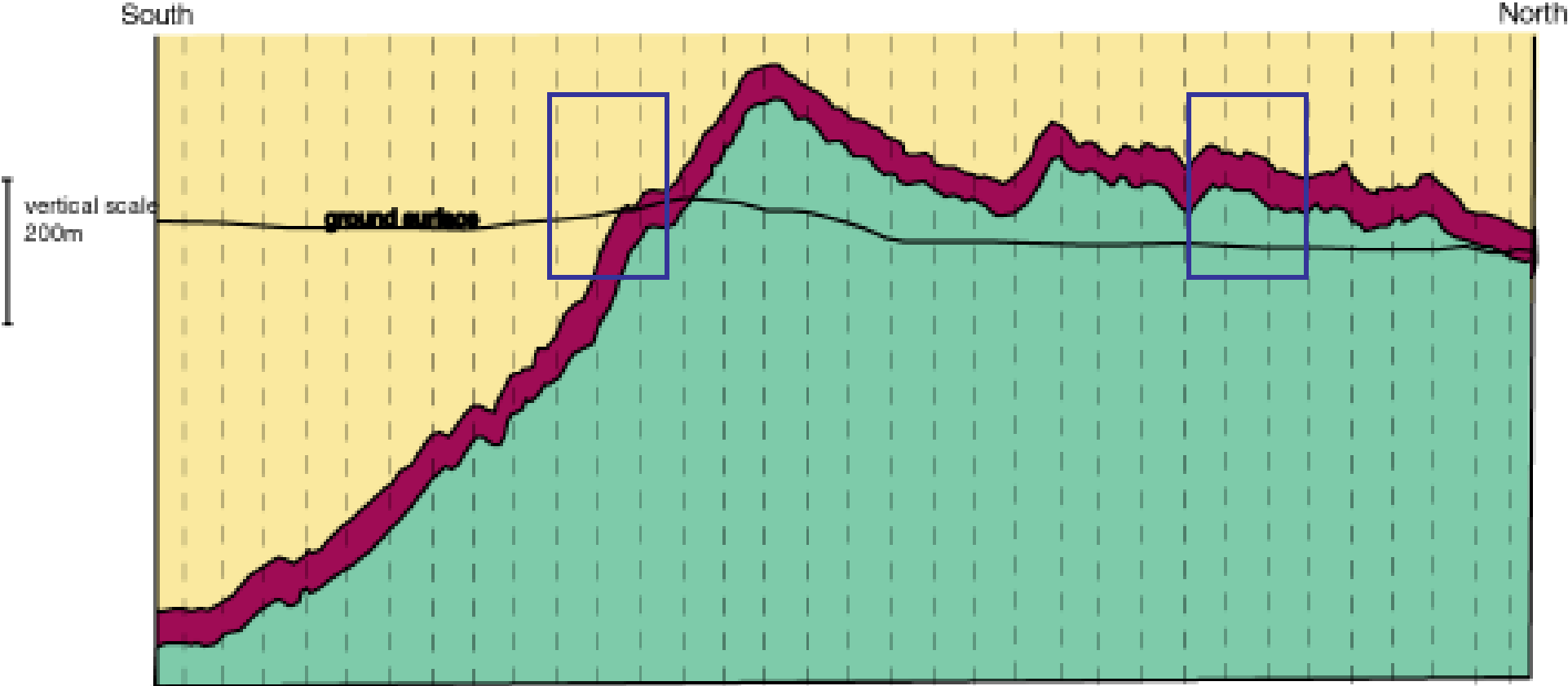
Figure 4.2: QFL (quartz-feldspar-lithic) ternary diagram for greywackes of the Clogher Head, Little Harbour and Glaspistol Formations.



Geochemistry of Brú na Bóinne greywackes and putative sources



# Clogher Head Cross-Section



### Key


- Glaspistol Fm.
- Little Harbour Fm.
- Red Mans Cove Fm.
- Clogherhead Fm.

1km

cleavage

# Sources of exotic stones at Brú na Bóinne

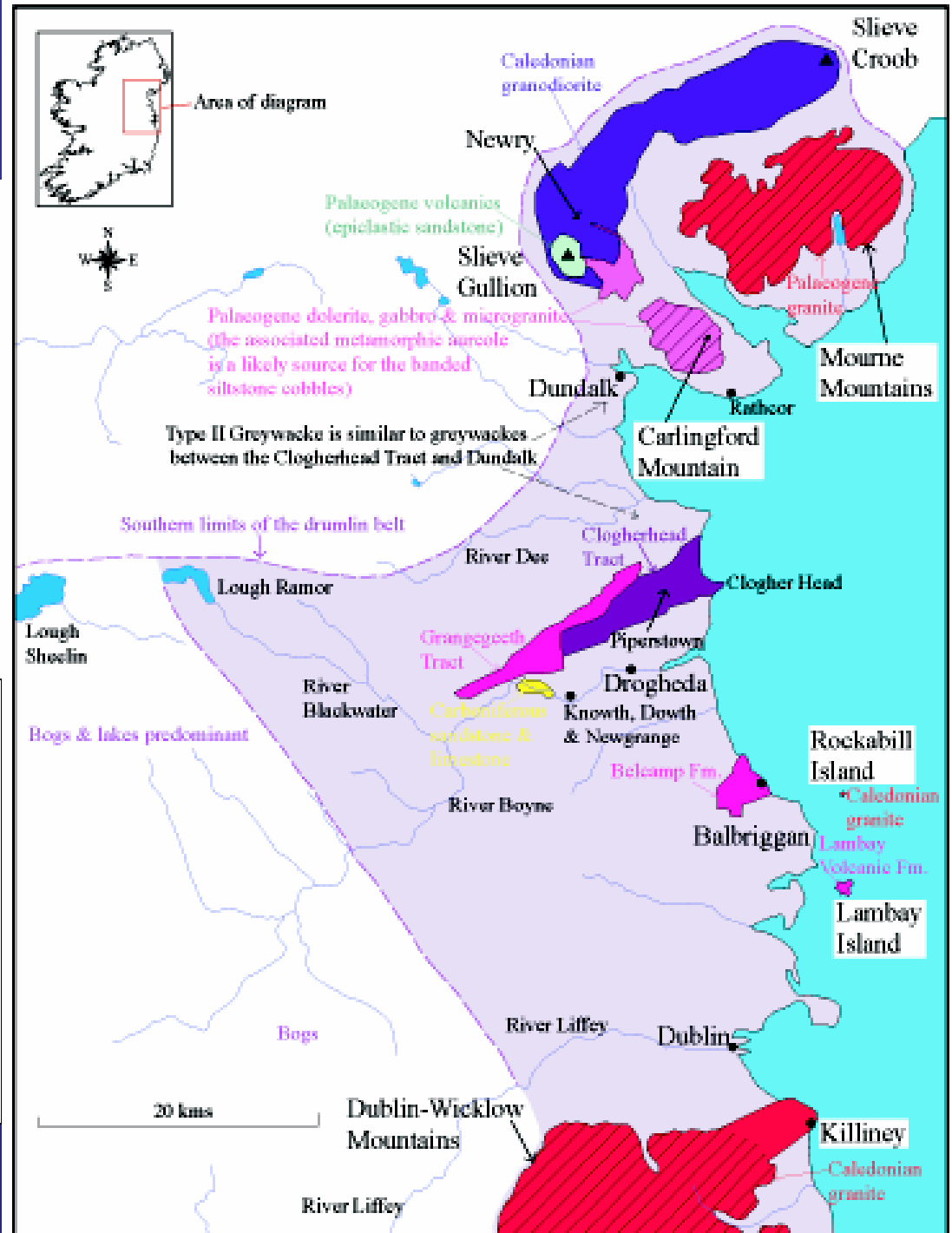
-  Clogherhead Tract (Type I & Type II Greywacke building stones)
-  Carboniferous sandstone & limestone (kerbstones & standing stones)
-  Ordovician volcanics (Knowth kerbstones & Newgrange volcanic standing stones)
-  Palaeogene dolerite, gabbro & microgranite (Knowth & Dowth kerbstones, & cobbles of gabbro & microgranite)
-  Palaeogene volcanic rocks (Dowth epiclastic sandstone kerbstones)

 Caledonian & palaeogene granites (quartz pieces; granite cobbles & microgranite basins)

 Caledonian granodiorite (granodiorite cobbles)

 Passage tomb catchment area

 Mountainous area





Standing stone at Baltray