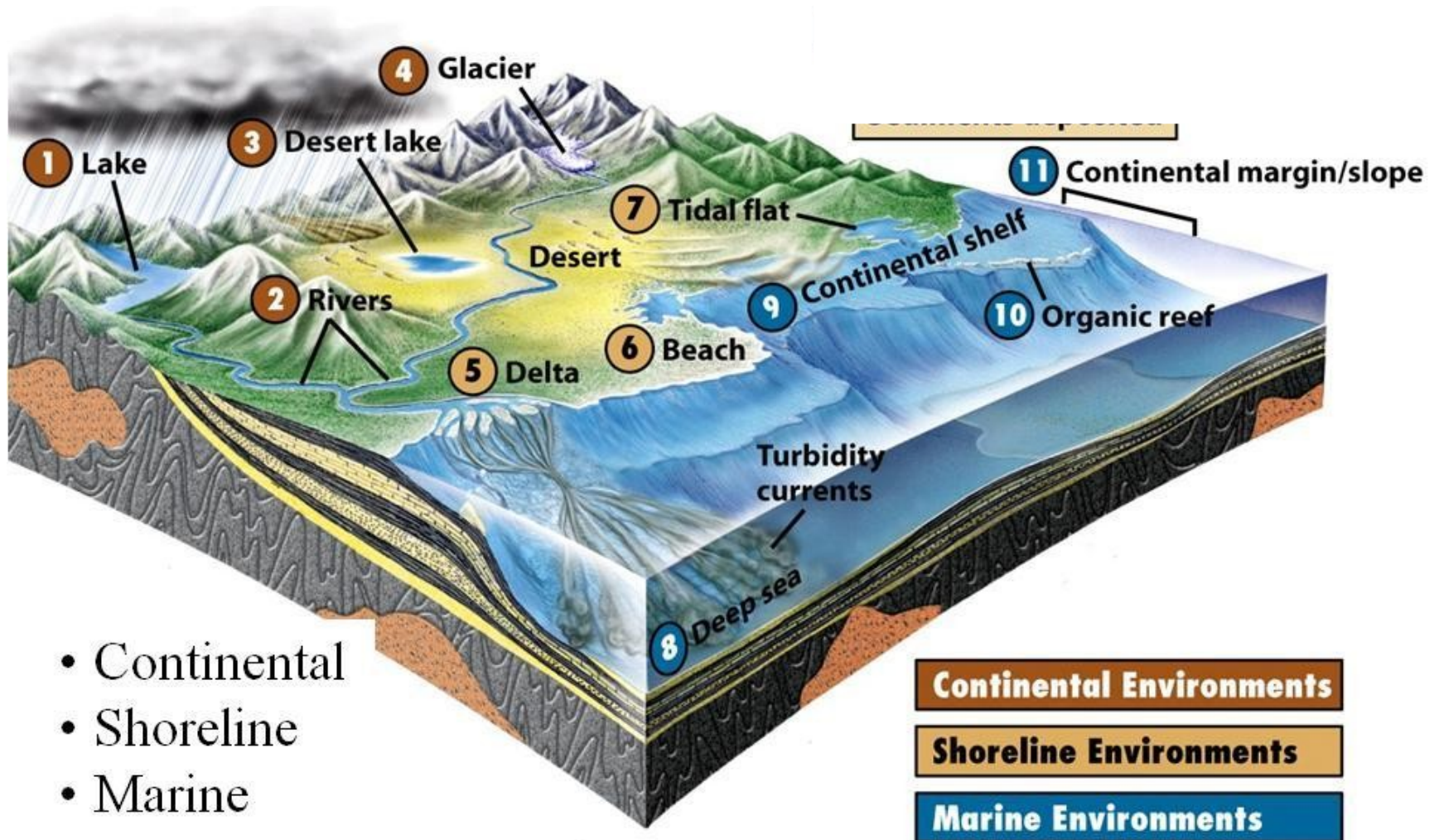


Sedimentologia – GSA0252

Fácies e depósitos glaciais

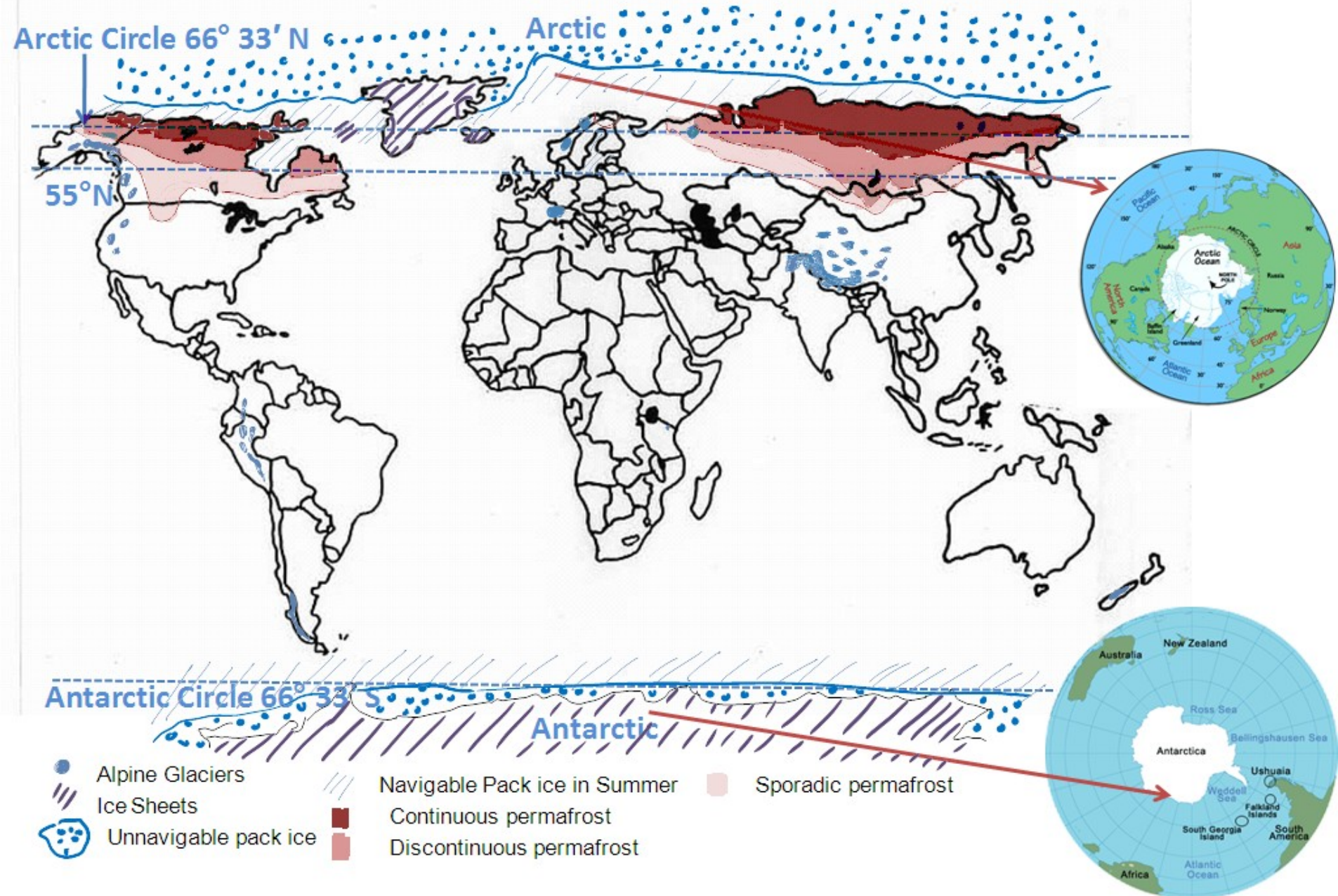
Prof. André Marconato

Ambientes deposicionais



- Continental
- Shoreline
- Marine

A map of global cold environments



Gelo como agente de transporte

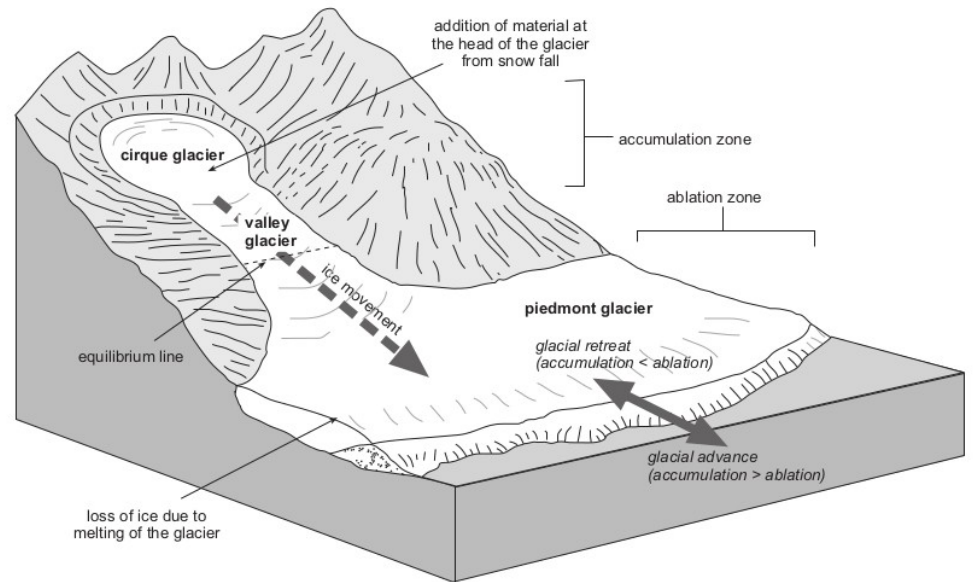
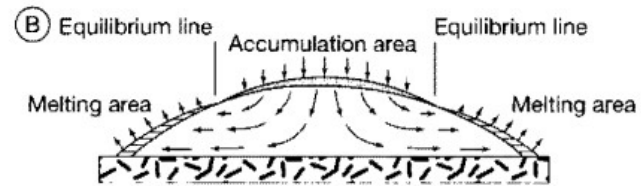
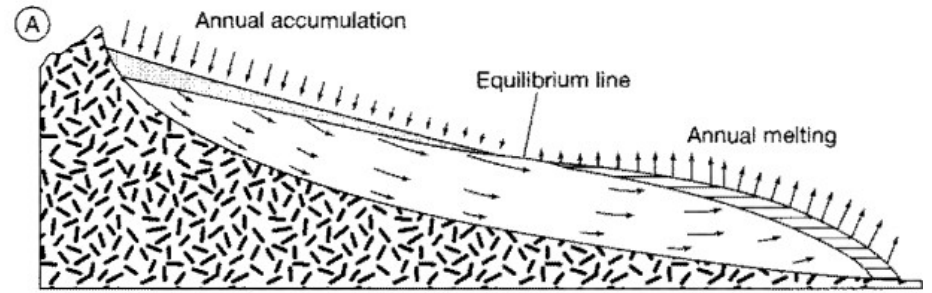
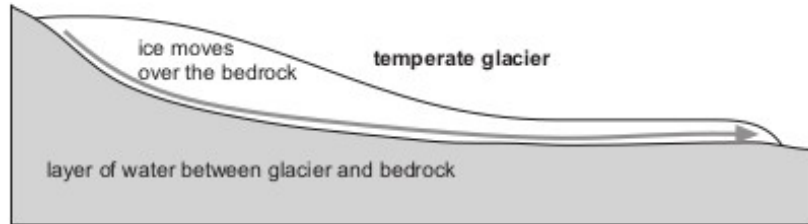
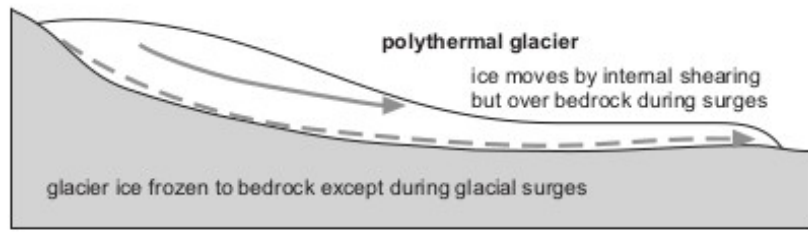
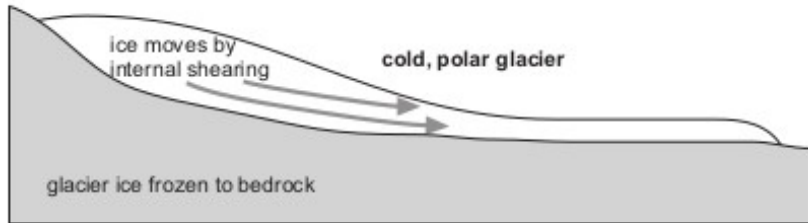


Fig. 7.1 Snowfall adds to the mass of a glacier in the accumulation zone and as the glacier advances downslope it enters the ablation zone where mass is lost due to ice melting. Glacial advance or retreat is governed by the balance between these two processes.



Ambiente Glacial

- Zona Basal (Subglacial) – em contato com o leito
- Supraglacial – superfície da geleira
- Zona de contato de gelo – ao redor da margem da geleira
- Zona englacial – dentro da geleira

- Zona Proglacial: região influenciada pelo degelo, mas não em contato direto com a geleira
 - Glaciofluvial
 - Glaciolacustrino
 - Glaciomarinho

- Zona Periglacial: além do proglacial

Ambientes proglaciais

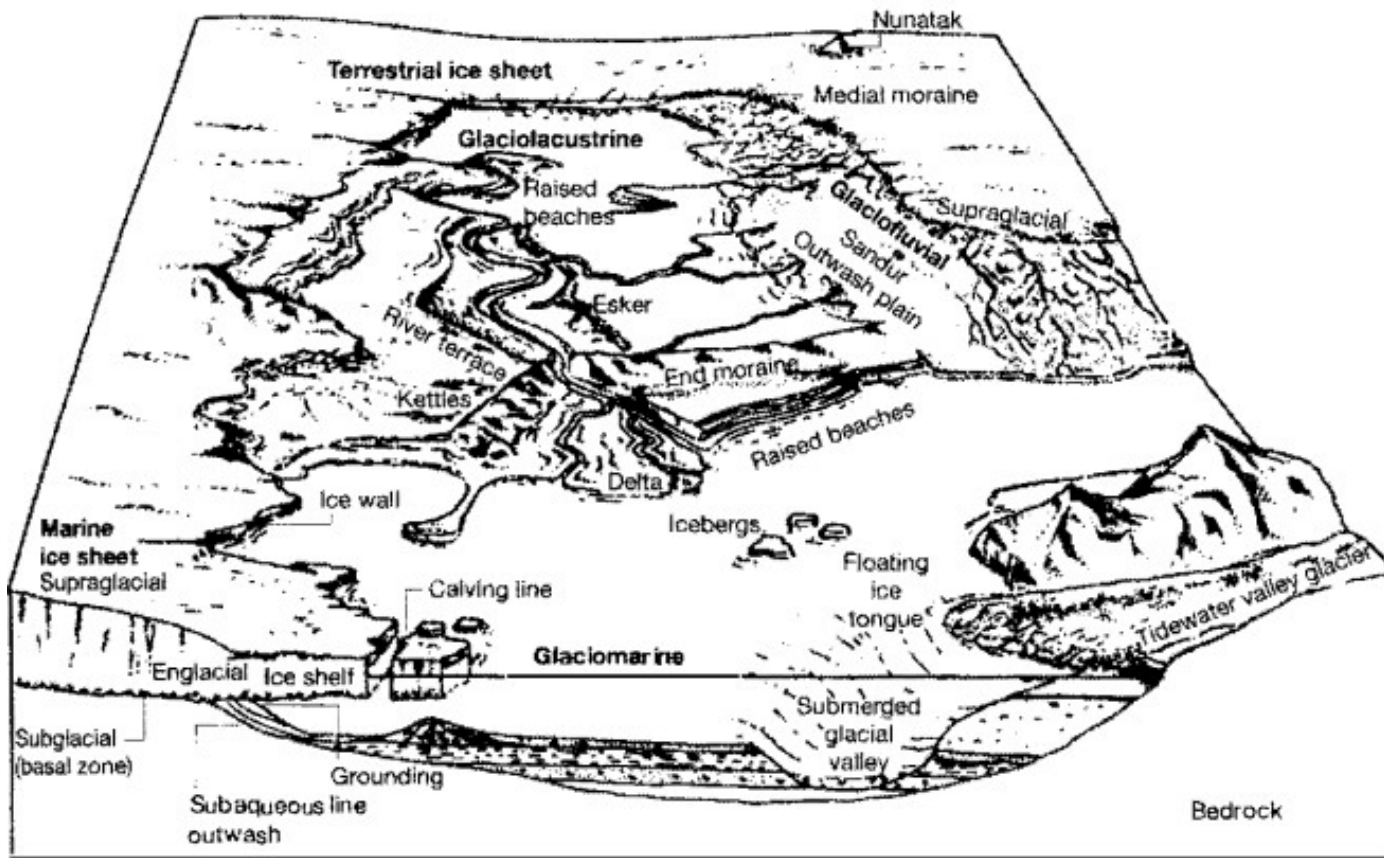
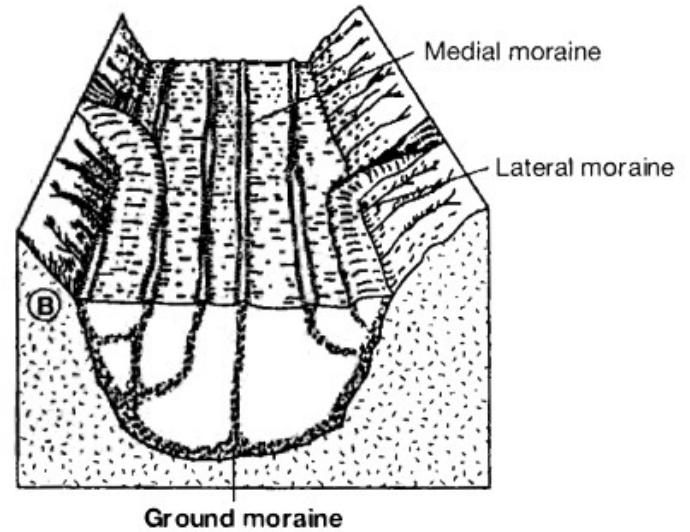


Figure 8.27

Glacial and associated proglacial environments. [After Edwards, M. B., 1986, *Glacial environments*, in Reading, H. G. (ed.), *Sedimentary environments and facies*, 2nd ed., Fig. 13.2, p. 448, reproduced by permission of Elsevier Science Publishers, Amsterdam.]

Sedimento em contato com gelo



Sedimento em contato com gelo

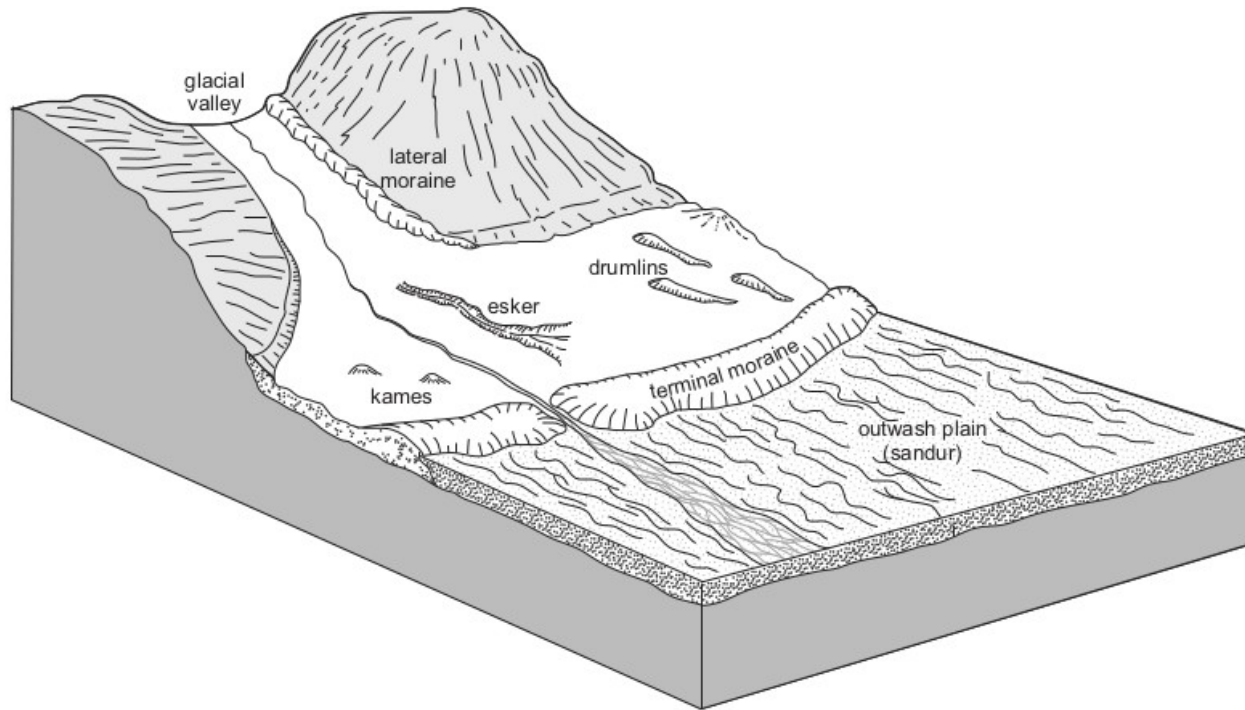


Fig. 7.7 Glacial landforms and glacial deposits in continental glaciated areas.

Processos glaciomarinhos

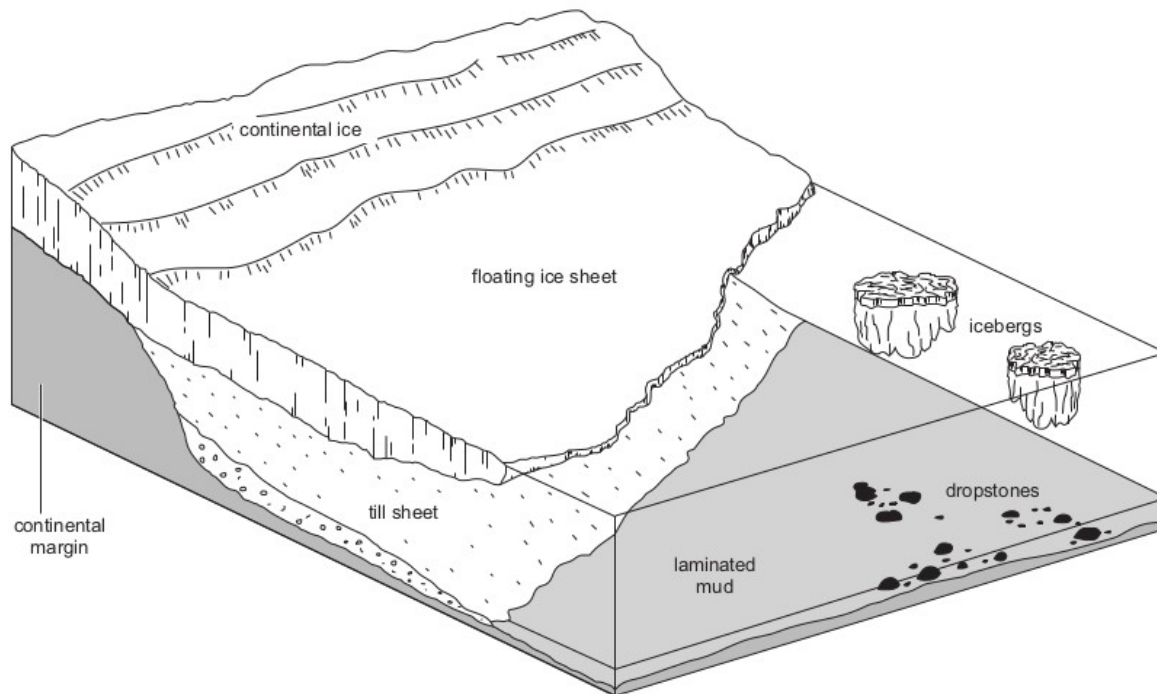
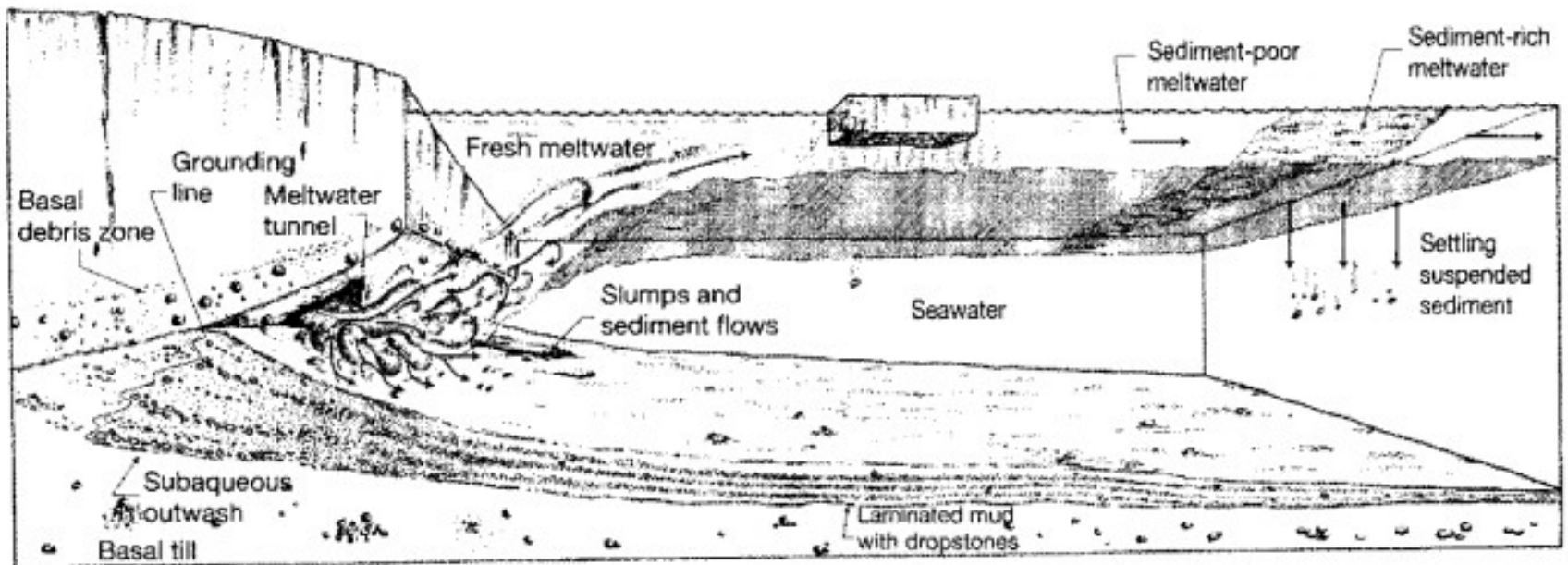
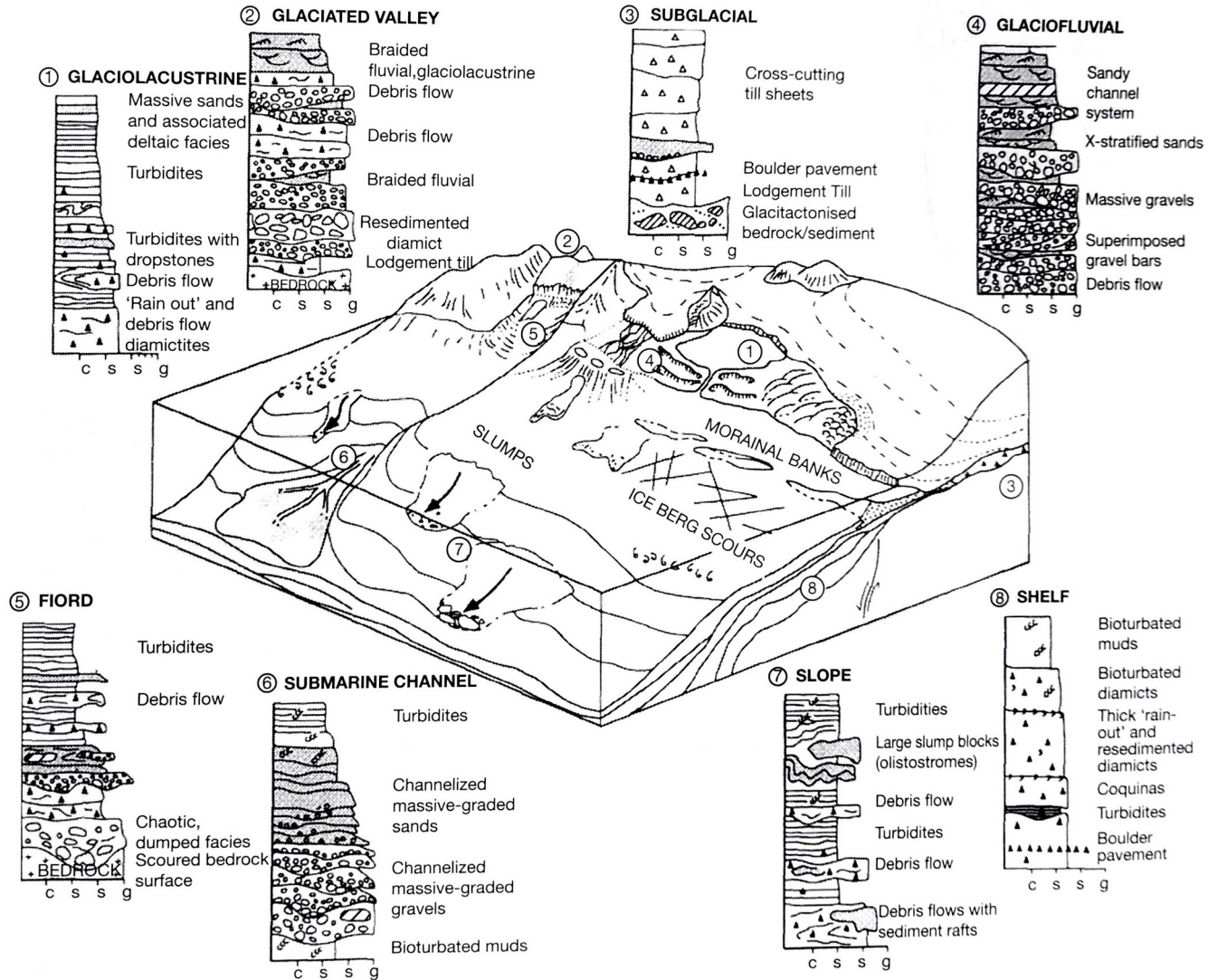


Fig. 7.12 At continental margins in polar areas, continental ice feeds floating ice sheets that eventually melt releasing detritus to form a till sheet and calve to form icebergs, which may carry and deposit dropstones

Processos glaciomarinhos



Fácies glaciais



Fácies glaciais



Fácies glaciais

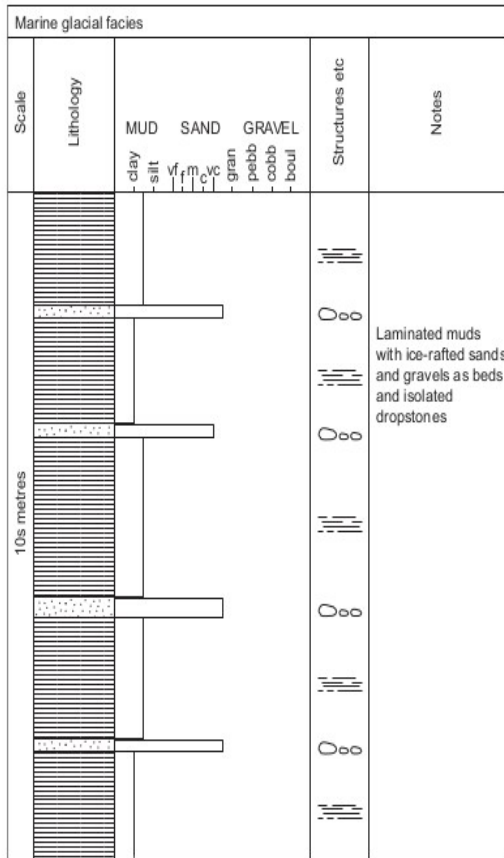


Fig. 7.14 Glaciomarine deposits are typically laminated mudrocks with sparse coarser debris derived from icebergs.

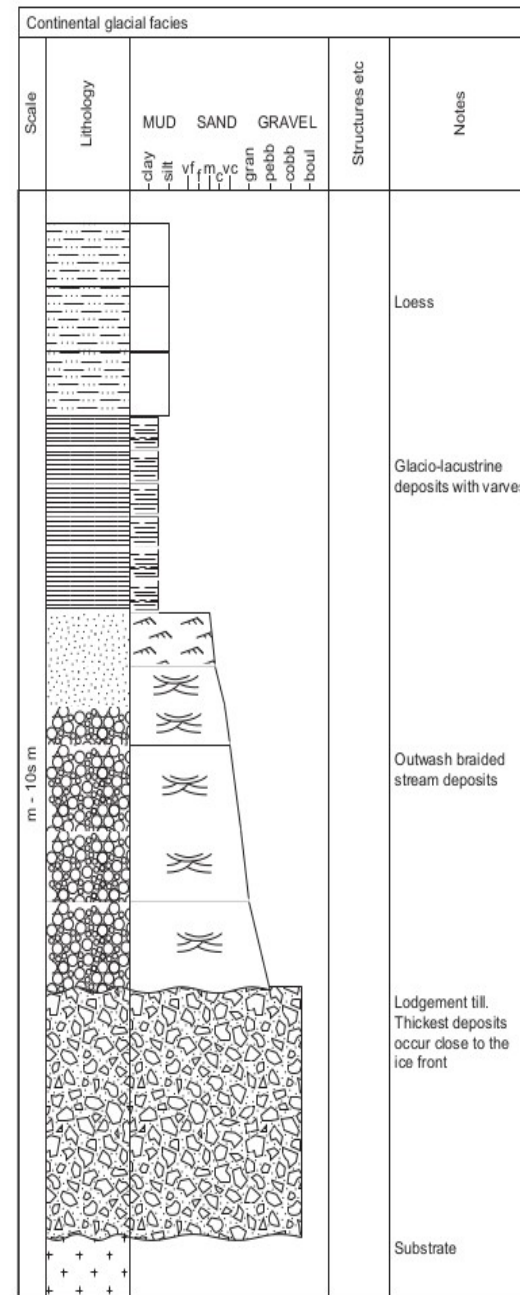


Fig. 7.8 Graphic sedimentary log illustrating some of the deposits of continental glaciers.

Bibliografia Recomendada

- Boggs, S. Principles of Sedimentology and Stratigraphy. 5th Ed. Prentice Hall. 585p.
- Nichols, G. Sedimentology and Stratigraphy. 2nd Ed. Willey-Blackwell. 419p.
- Pedreira da Silva, A.J.C.L, Aragão, M.A.N.F., Magalhães, A.J.C. 2008. Ambientes de sedimentação siliciclástica do Brasil. Beca-BALL Edições. 343p.
- Teixeira W., Fairchild T.R., Toledo M.C.M., Taioli F. 2009. Decifrando a Terra. 2^a edição. Editora: Companhia Editora Nacional. 623p.