

**EAST COAST BASIN ATLAS SERIES
GRAND BANKS OF NEWFOUNDLAND
BIOSTRATIGRAPHY AND MATURATION DATA 2
PALYNOLOGICAL AND
MICROPALEONTOLOGICAL DATA**

CONTRIBUTORS

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 Recommended citation: Ascoli, P., Barrs, M. S., Bujak, J. P., Davies, E. H., Fensome, R. A., Gradstein, F. M., Williams, G. L., and Williamson, M. A., 1997. East Coast Basin Atlas Series: Grand Banks of Newfoundland. Biostratigraphy and maturation data 2: palynological and micro-paleontological data. Geological Survey of Canada, Open File 3458, 2 map sheets. Additional copies of this map sheet may be obtained from the Geological Survey of Canada (Atlantic), P.O. Box 1008, Dartmouth, Nova Scotia, B2Y 4A2, Canada. Phone: 902-426-4266; FAX: 902-426-4848; e-mail: agp@agc.ns.ca; website: http://agc.ns.ca

PALYNOLOGICAL AND MICROPALEONTOLOGICAL AGES OF STRATA IN WELLS ON THE GRAND BANKS AND IN ADJACENT AREAS

Figure 8 shows the ages of all strata proven biostratigraphically for all wells in the report area. Ages proven palynologically are indicated in red on the left side of each column; ages proven micro-paleontologically are indicated in green on the right side of each column. In cases where only part of a well has been analyzed, the top and bottom of the analyzed interval is indicated by an arrow; a straight line across the top or bottom of a section line indicates that no samples beyond these horizons were available or no assemblages were yielded; wavy lines indicate the position of unconformities. A dashed line indicates an inferred date based on poor, undiagnostic assemblages or for other reasons causing uncertainty.

BIOSTRATIGRAPHIC DATA

Since it is not practical to present all microfossil zone and age determinations in the form of cross-sections and single-well columns, all the biostratigraphic picks are presented in Figures 9-13 (this sheet) and Figures 14-15 (sheets 3 and 4).

Figures 9 and 10 provide palynological zone tops for all wells for which zonal analyses are available. Figure 9 shows data for wells in which the GSC zonation has been used; for these wells, the GSC zonation has been applied to post-Turonian strata. Figure 10 shows data for wells in which the Bujak-Davies zonation has been used; for these wells, the GSC zonation has been applied to post-Turonian strata. Figure 14 (sheet 3) shows the tops of geochronologic units in cases where the assemblages were not sufficiently definitive to allow for application of the appropriate zonation scheme. The zone codes or age determinations are compiled to the left on each spreadsheet.

Tables of palynological data have been compiled from information from Barrs et al. (1979), Bujak-Davies Group (1988) and previously unpublished data.

Figure 11 shows foraminiferal and ostracod zone tops for all wells for which zonal analyses are available. Information is from Ascoli (1989).

Figure 12 shows Cenozoic correlations of some wells in the report area based on analyses of planktonic foraminiferal assemblages by Gradstein and Agterberg (1982, see text-fig. 11 for an explanation). Figure 13 shows depth to stage or subsage tops as indicated in Williamson (1987).

Figure 15 (sheet 4) shows the tops of geochronologic units in cases where the assemblages are not sufficiently definitive to allow for the application of a zonation scheme. Information from Ascoli (1989).

REFERENCES
 Ascoli, P., 1989. Mesozoic-Cenozoic foraminiferal, ostracod and calcipellid zonation of the North Atlantic margin of North America: Georges Bank - Scotian basin and northeastern Grand Banks (Jeanne d'Arc, Casco and Flemish Pass basins). Biostratigraphic correlation of 51 wells. Geological Survey of Canada, Open File 1791, 41 p.

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Bujak-Davies Group Ltd., 1988. Palynological analyses of some offshore Newfoundland wells. Geological Survey of Canada, Open File 1956-1985.

Gradstein, F. M. and Agterberg, F. P., 1982. Models of Cenozoic foraminiferal stratigraphy - northwestern Atlantic Margin. In Quantitative Stratigraphic Correlation, J. M. Coulb and R. A. Fensome (eds.), John Wiley and Sons, Ltd., Chichester, England, p. 115-173.

Williamson, M. A., 1987. A quantitative foraminiferal biostratigraphy of the Late Jurassic and Early Cretaceous of the East Newfoundland Basin. Micro-paleontology, v. 33, p. 37-65.

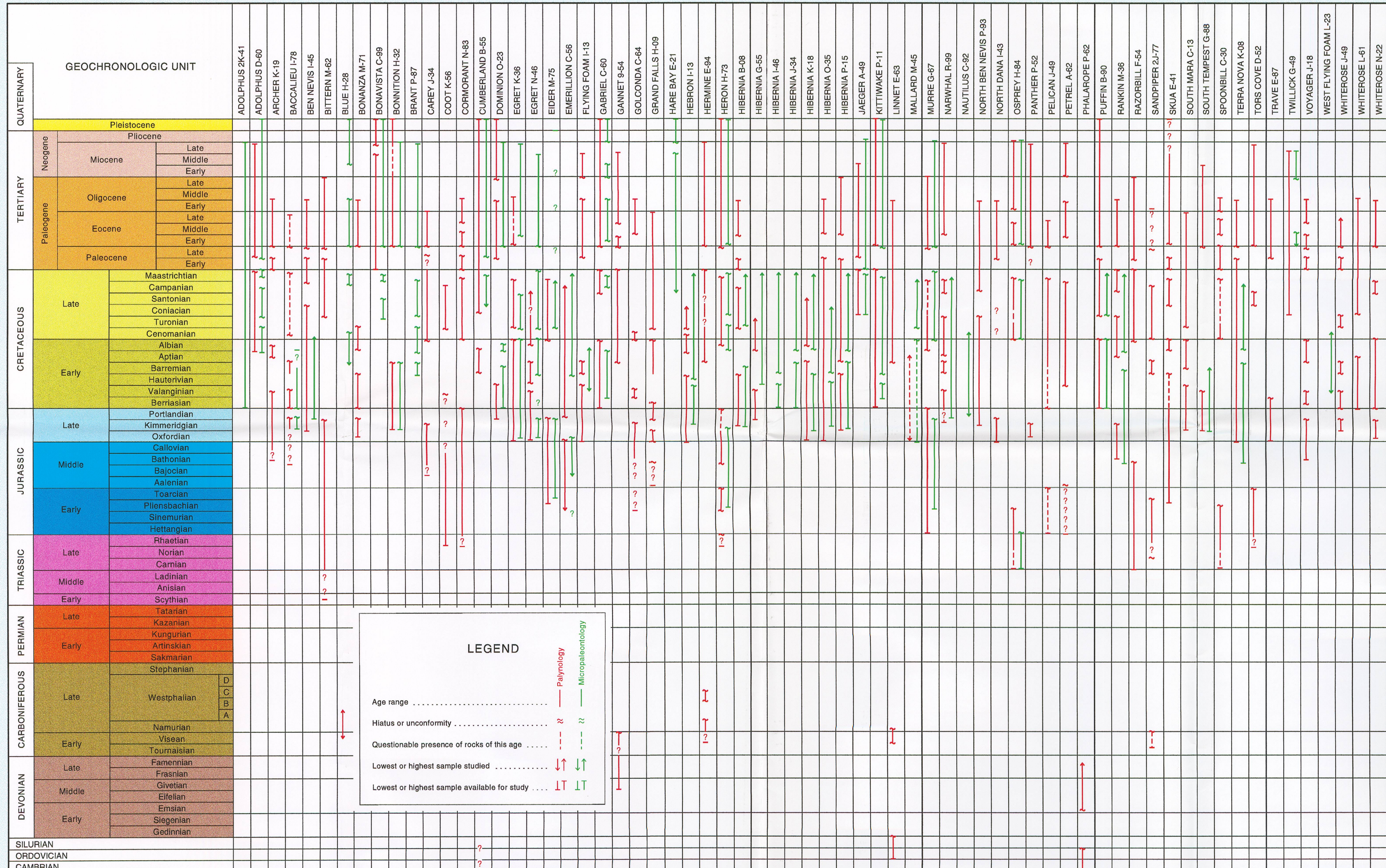


FIGURE 8. Ages of well sections as determined from palynology and micro-paleontology

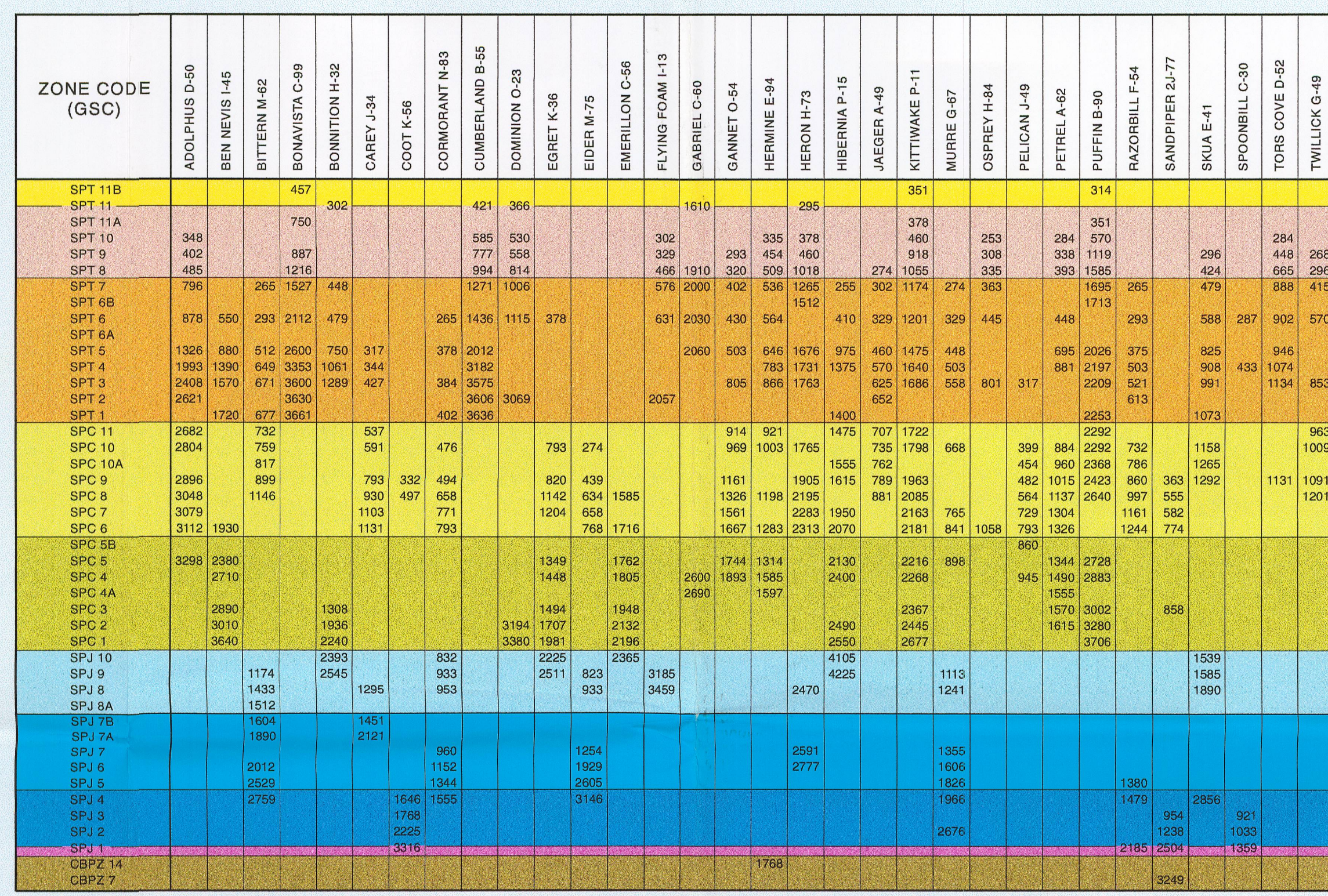


FIGURE 9. Depths to tops of palynological zones

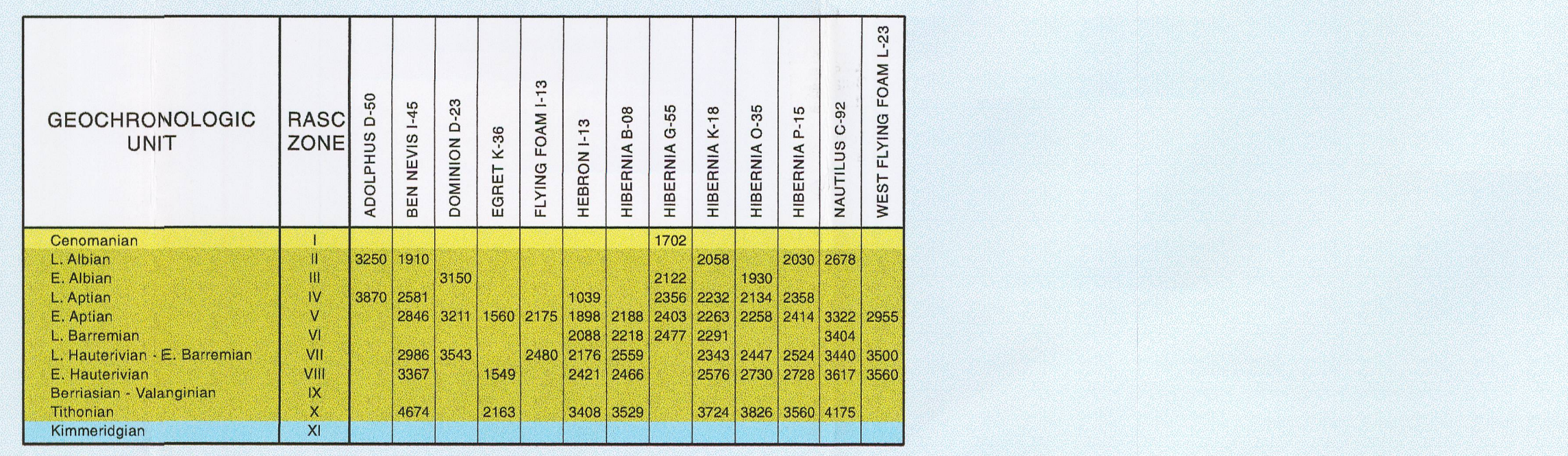


FIGURE 10. Depths to tops of foraminiferal and ostracod zones

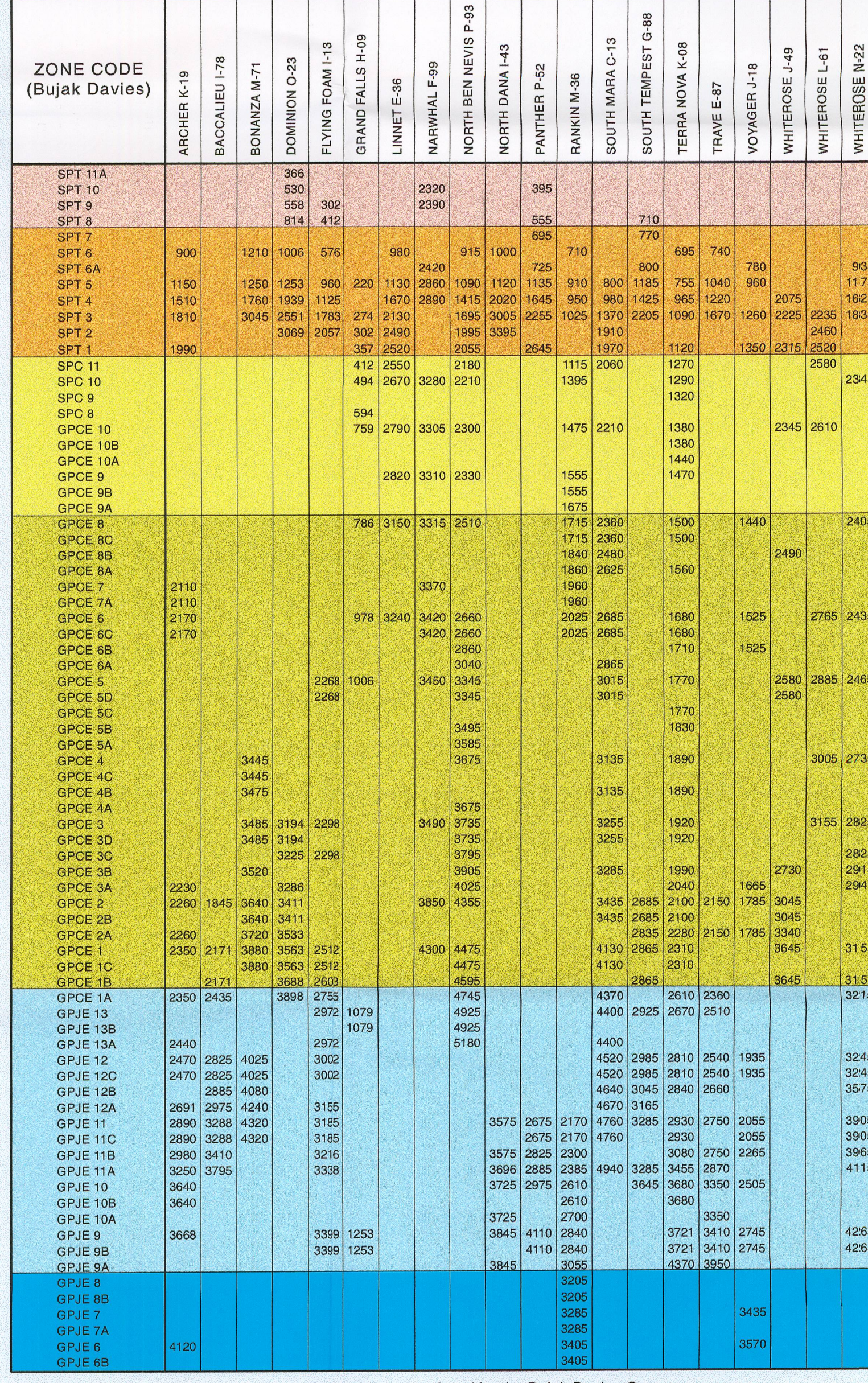
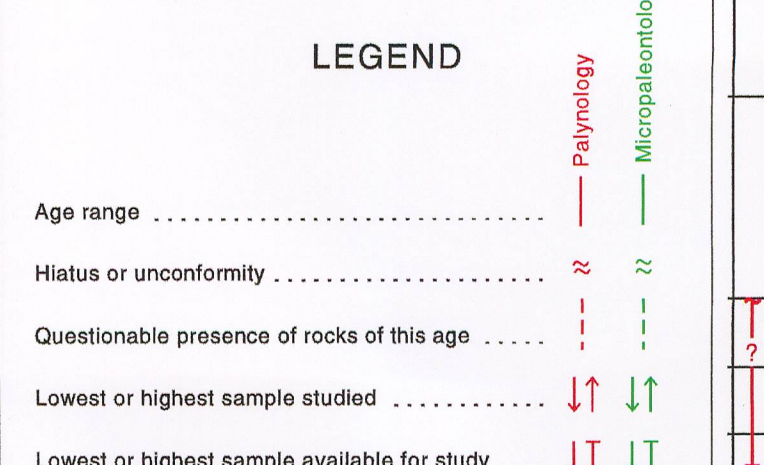


FIGURE 10. Depths to tops of palynological zones as analyzed by the Bujak-Davies Group

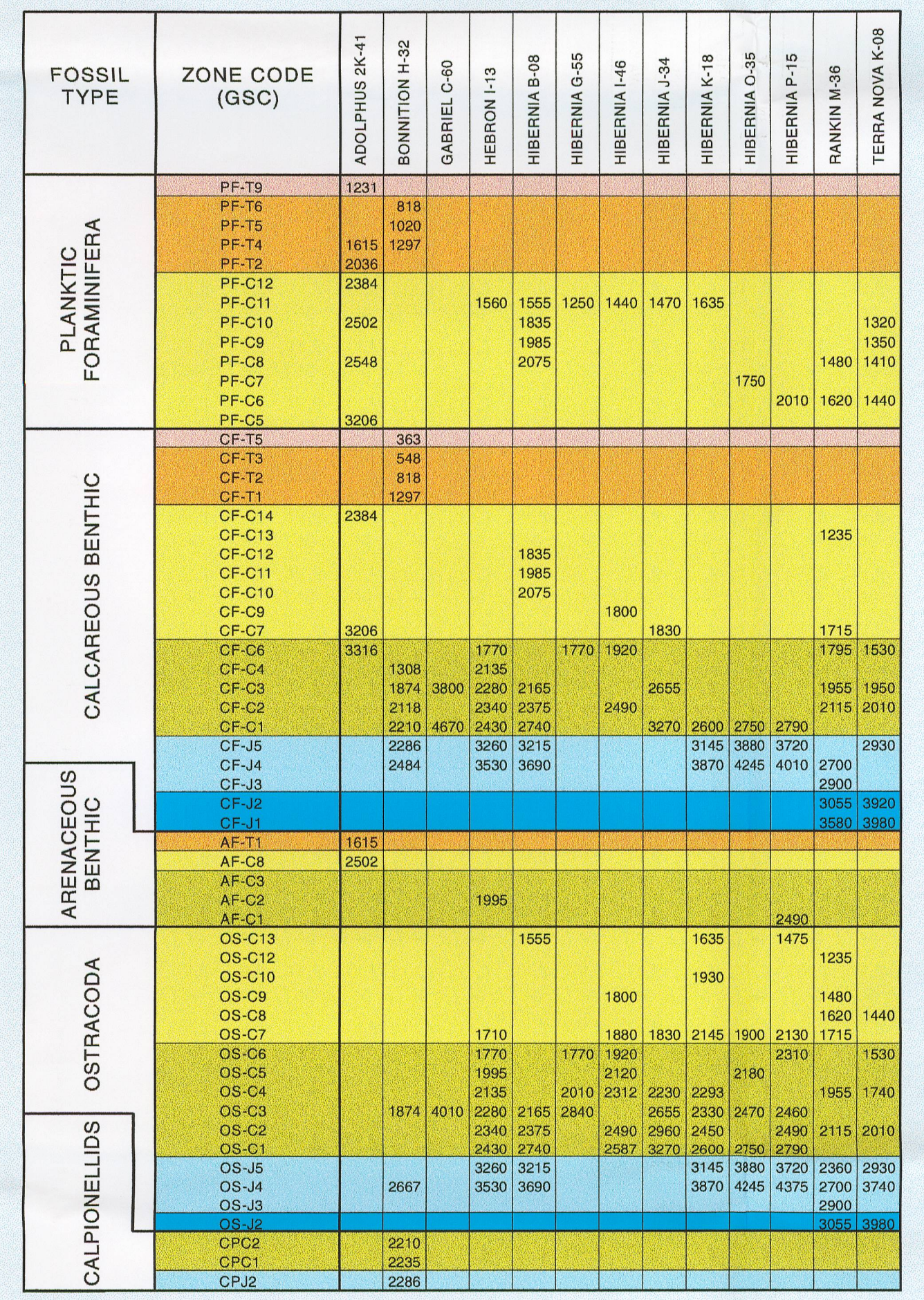


FIGURE 11. Depths to tops of foraminiferal and ostracod zones

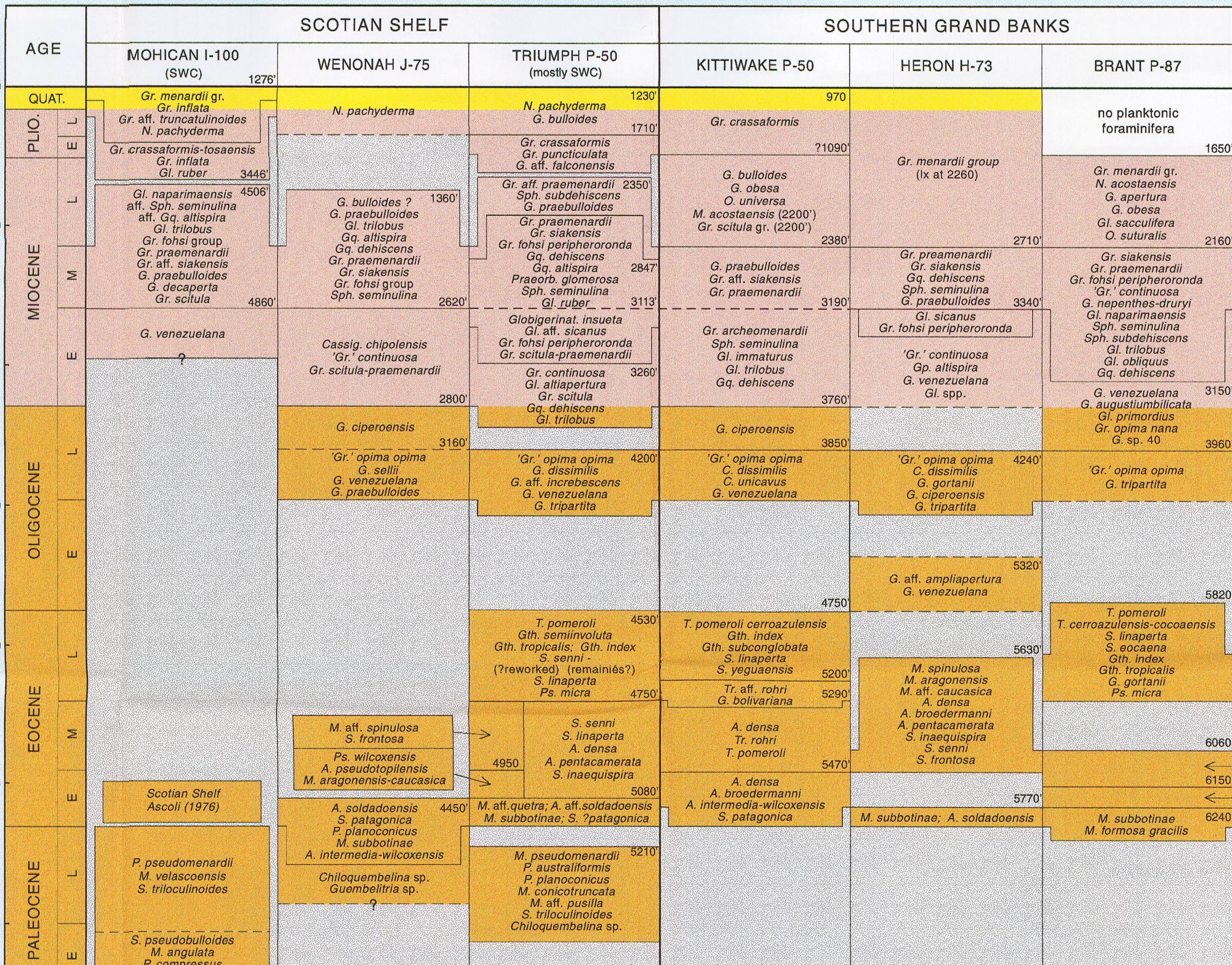


FIGURE 12. Stratigraphic distribution of planktonic foraminifera (after Gradstein and Agterberg, 1982)

