PHYTOPLANKTON - ZOOPLANKTON INTERACTIONS IN MT BOLD RESERVOIR, SOUTH AUSTRALIA.

Volume Two

by
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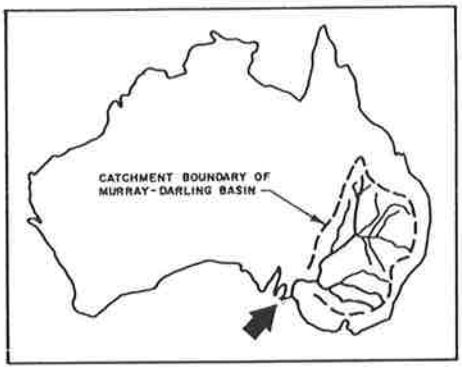
FIGURES



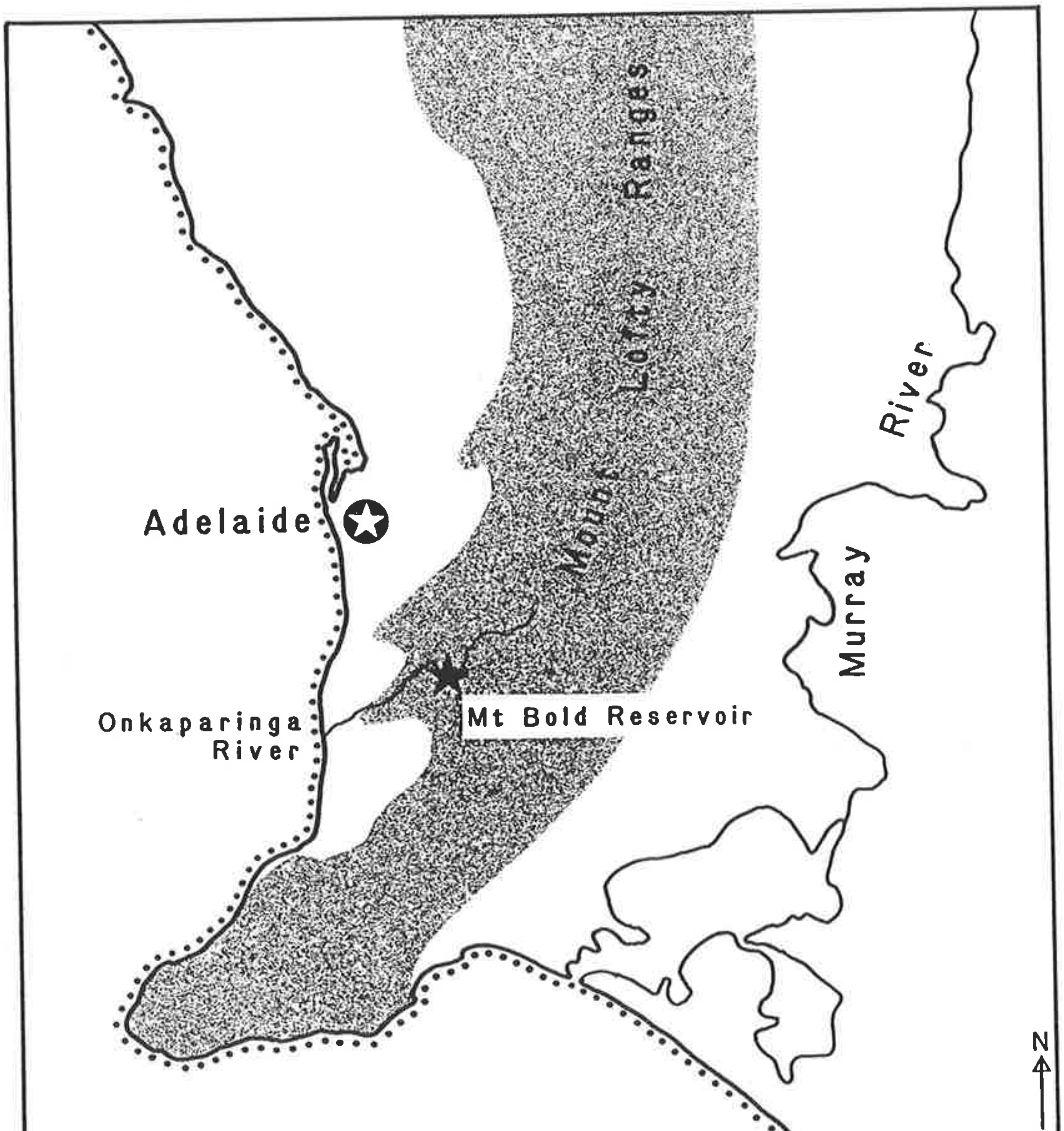


Figure 2.1 Location of Mt Bold Reservoir.

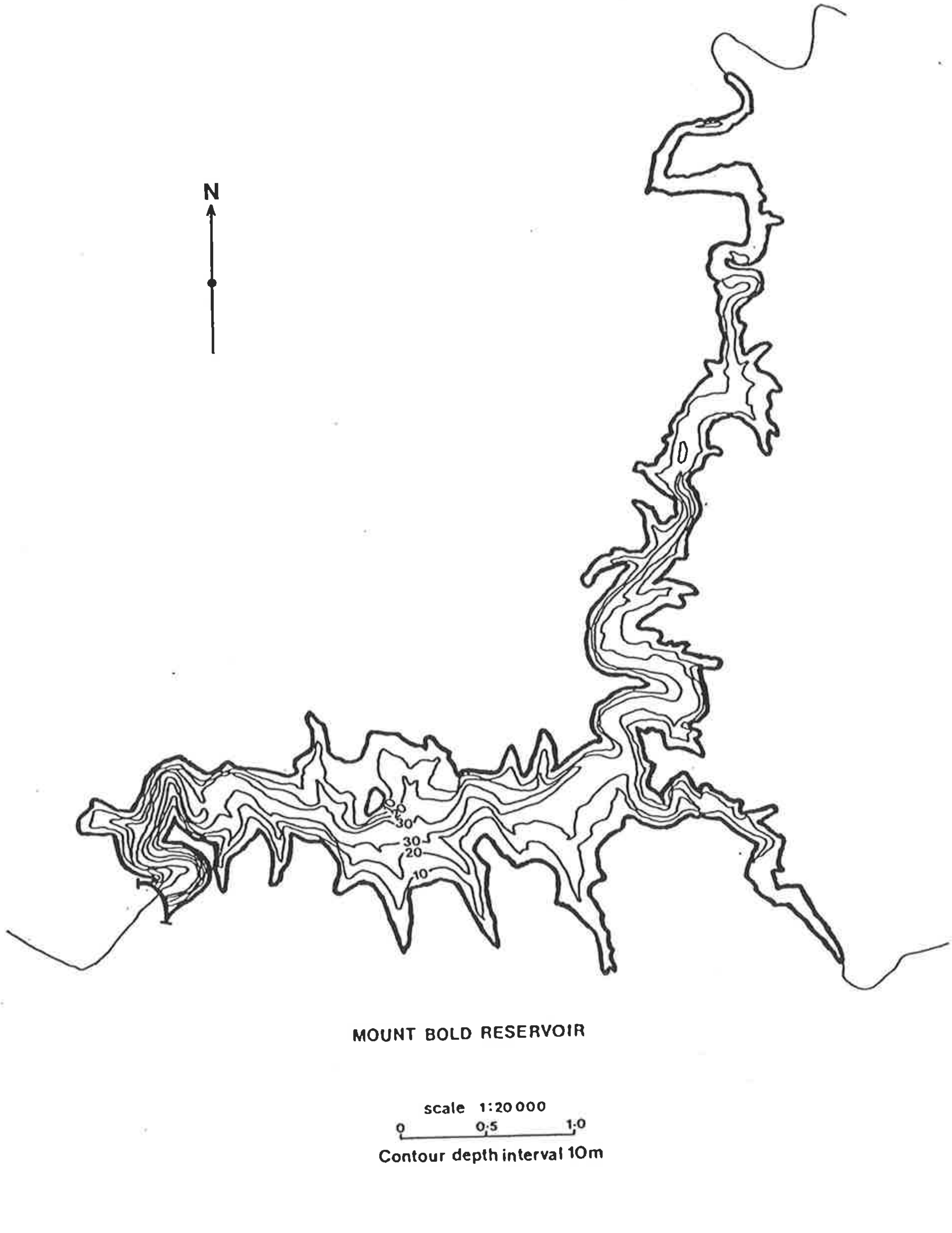


Figure 2.2 Morphometry and bathymetry of Mt Bold Reservoir.

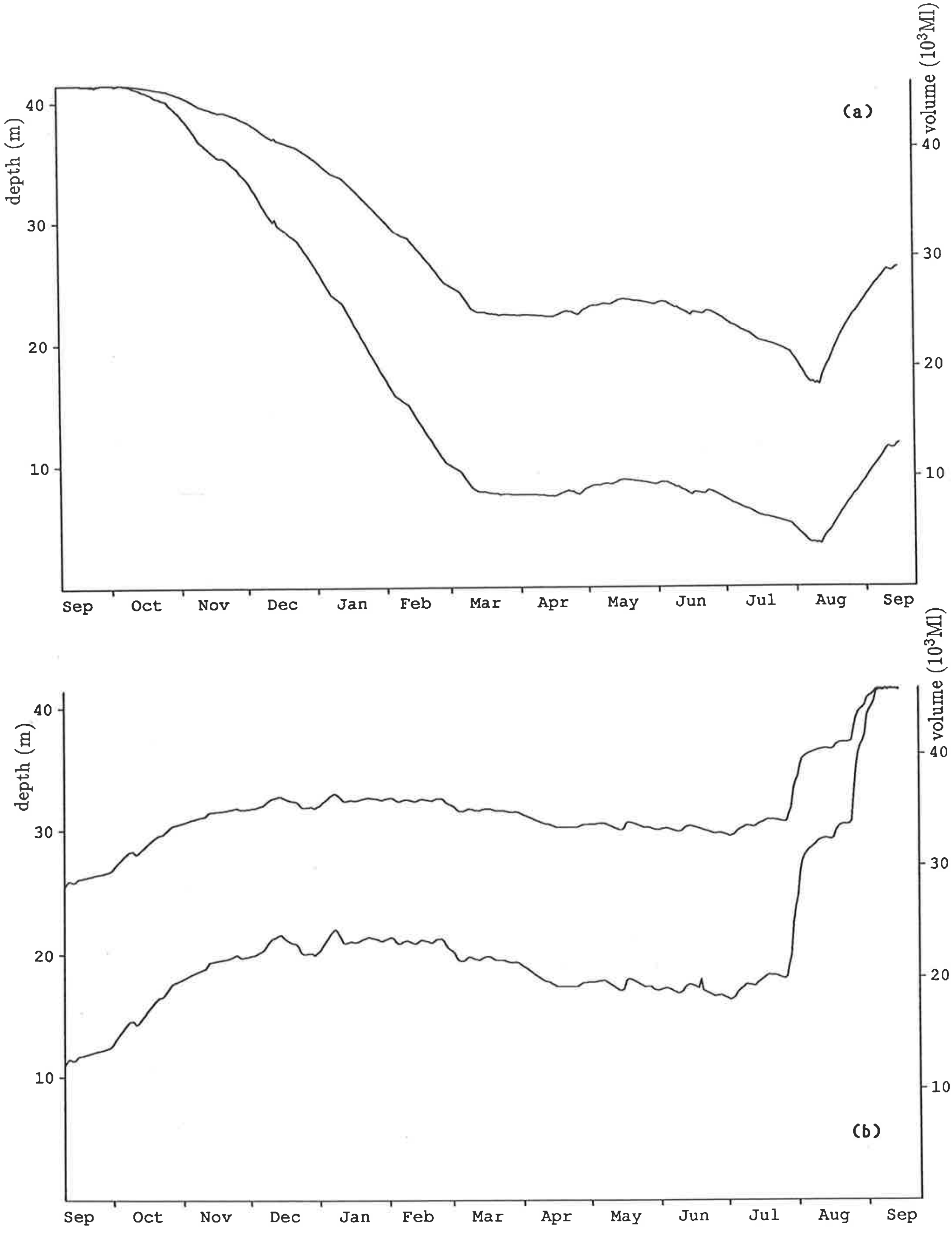


Figure 3.1 Water depth (m) [upper line] and storage volume (Ml) [lower line] in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

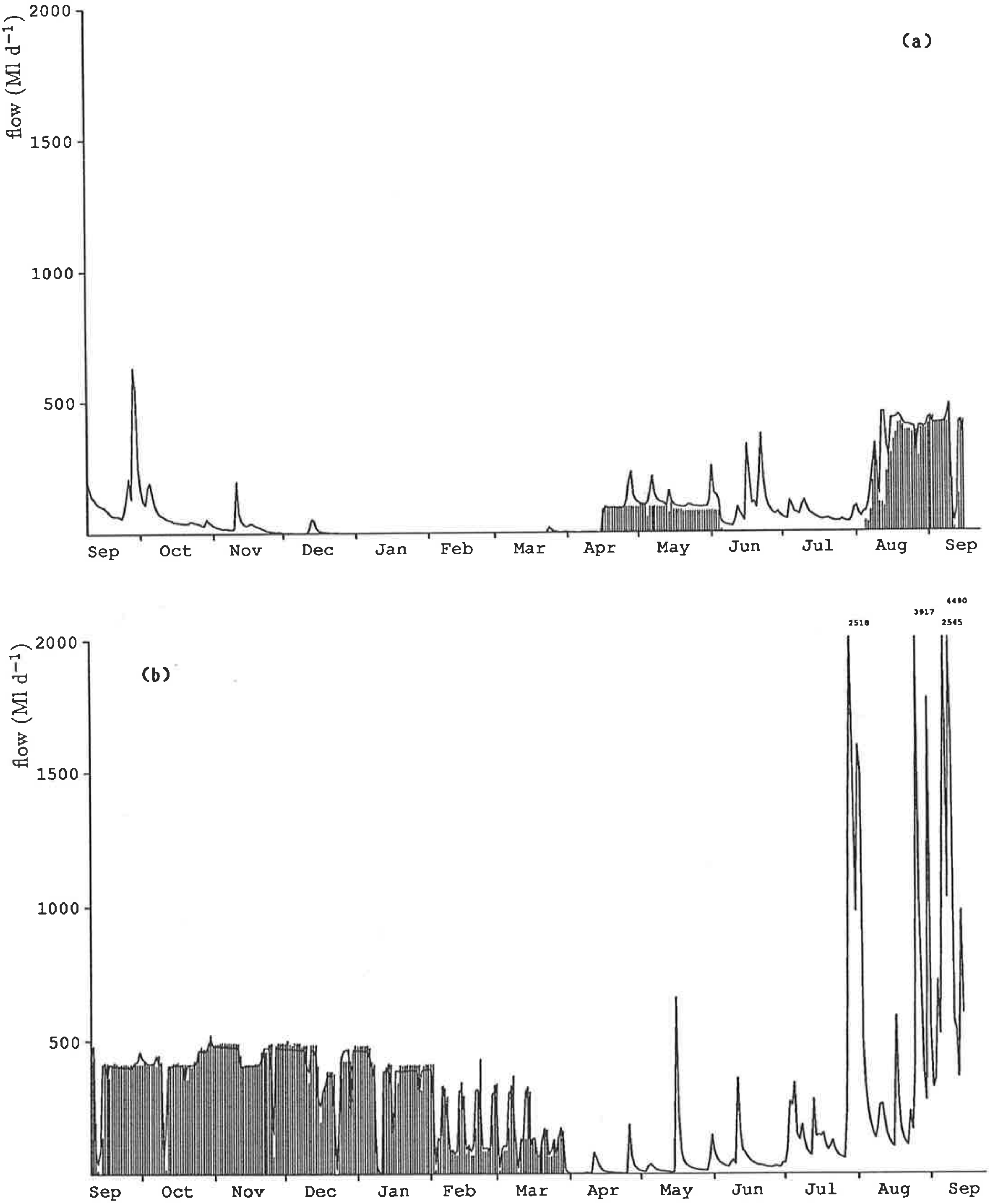


Figure 3.2 Daily flow (Ml d^{-1}) into Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. Murray River pumping is indicated by vertical bars.

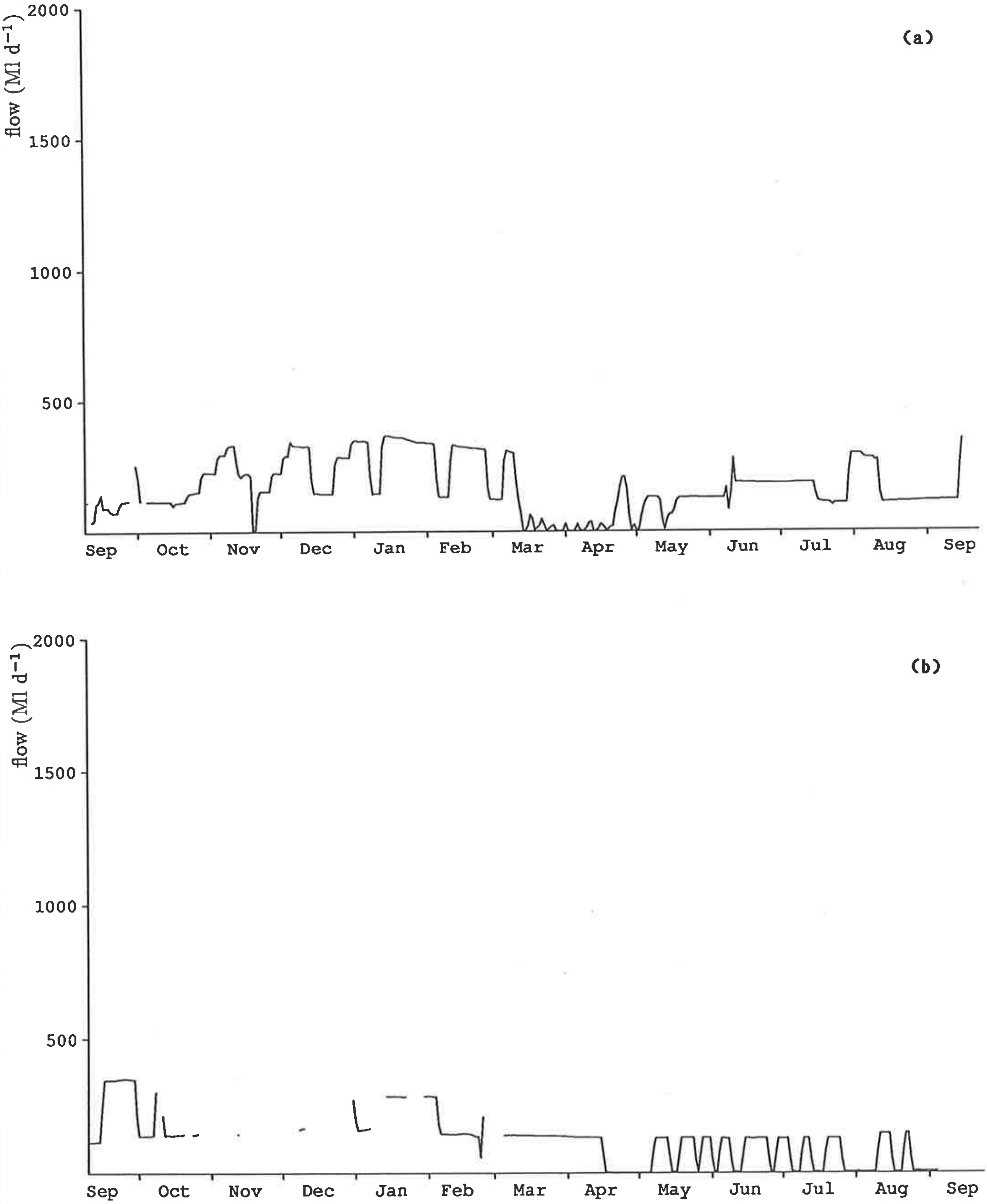


Figure 3.3 Daily flow (Ml d^{-1}) out of Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

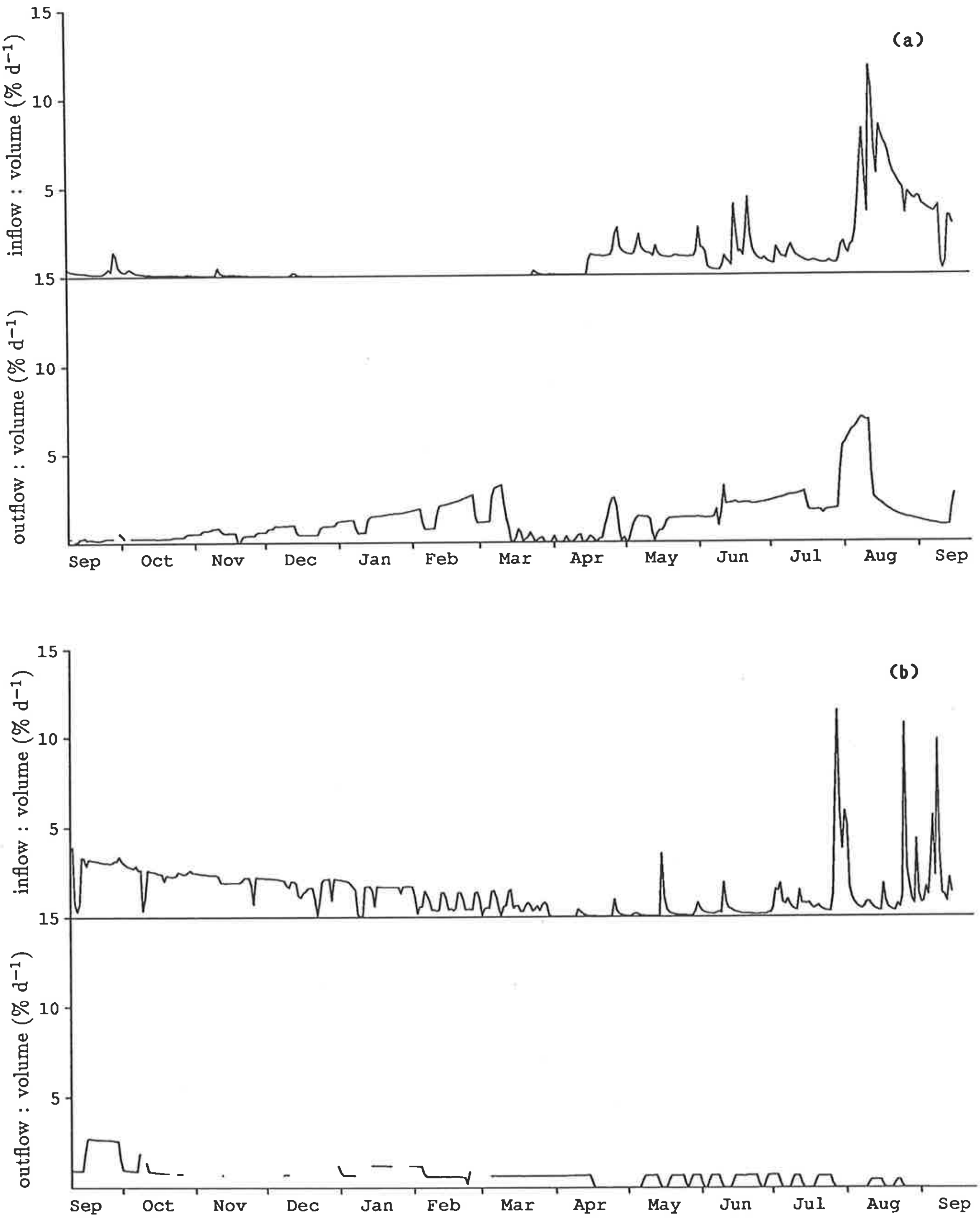


Figure 3.4 Ratio (%) of daily inflow [upper] and daily outflow [lower] to stored volume during (a) 1981/1982 and (b) 1982/1983.

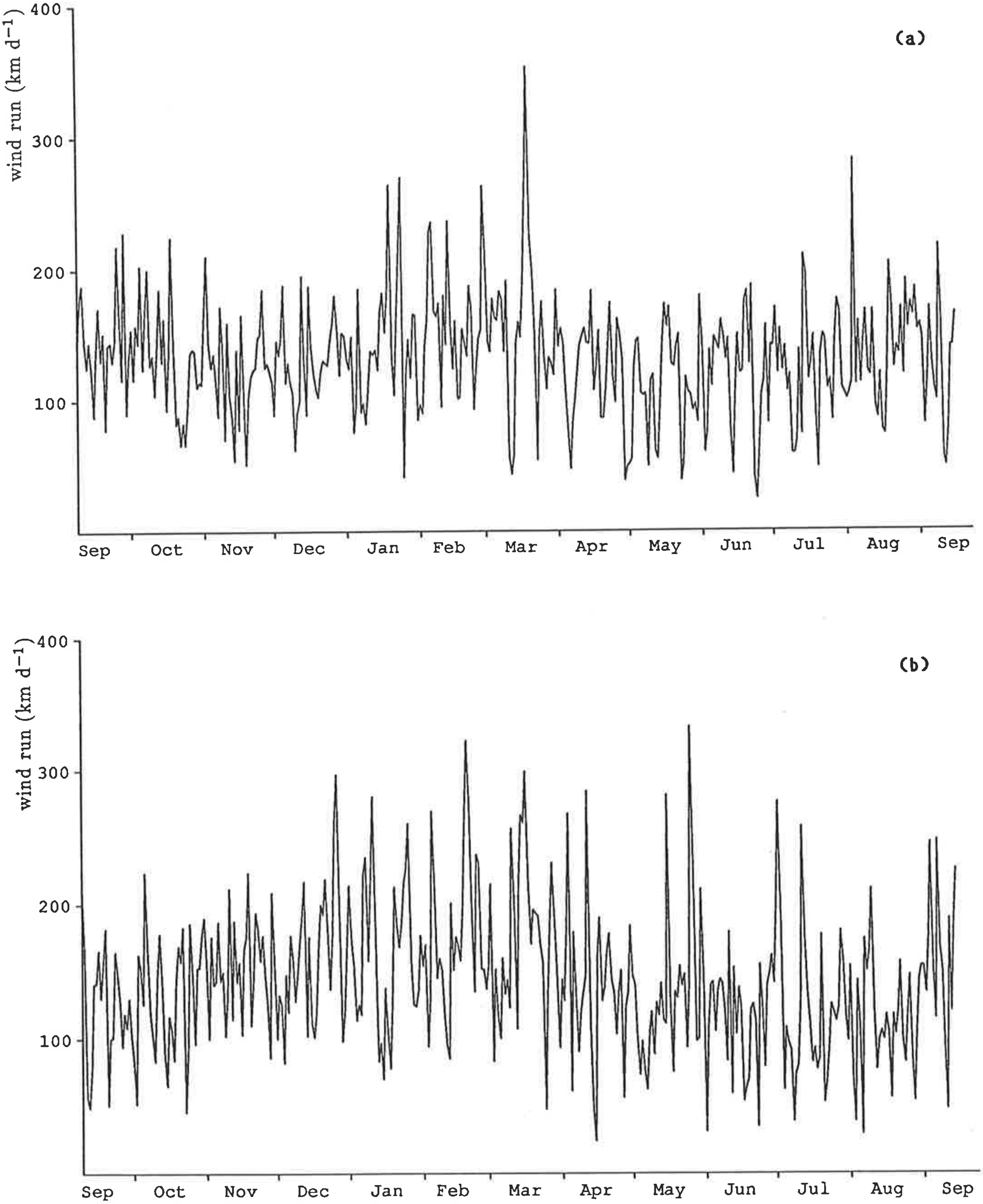


Figure 3.5 Daily wind run (km d^{-1}) at Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

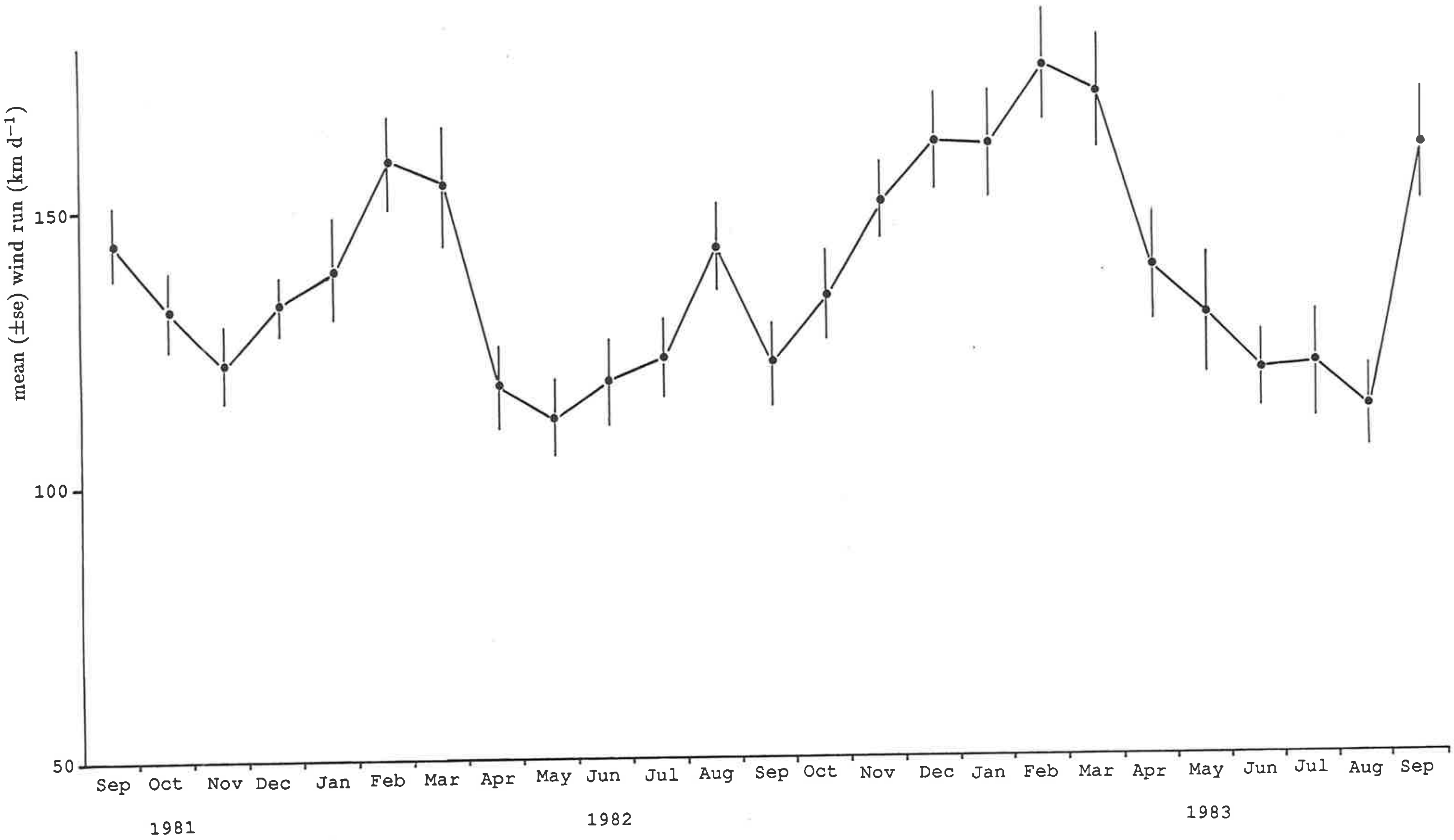
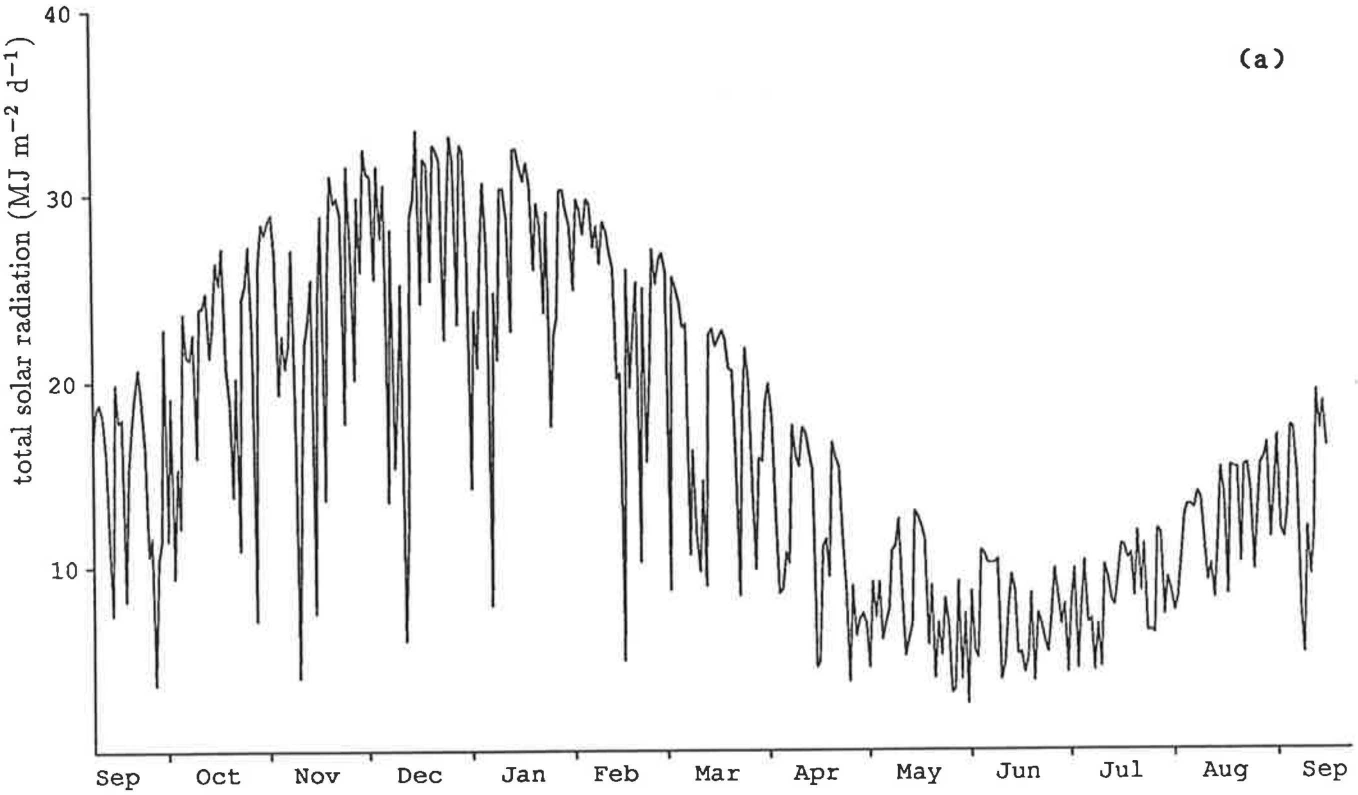


Figure 3.6 Mean (±se) daily wind run (km d^{-1}) at Mt Bold Reservoir during each month of the study period.



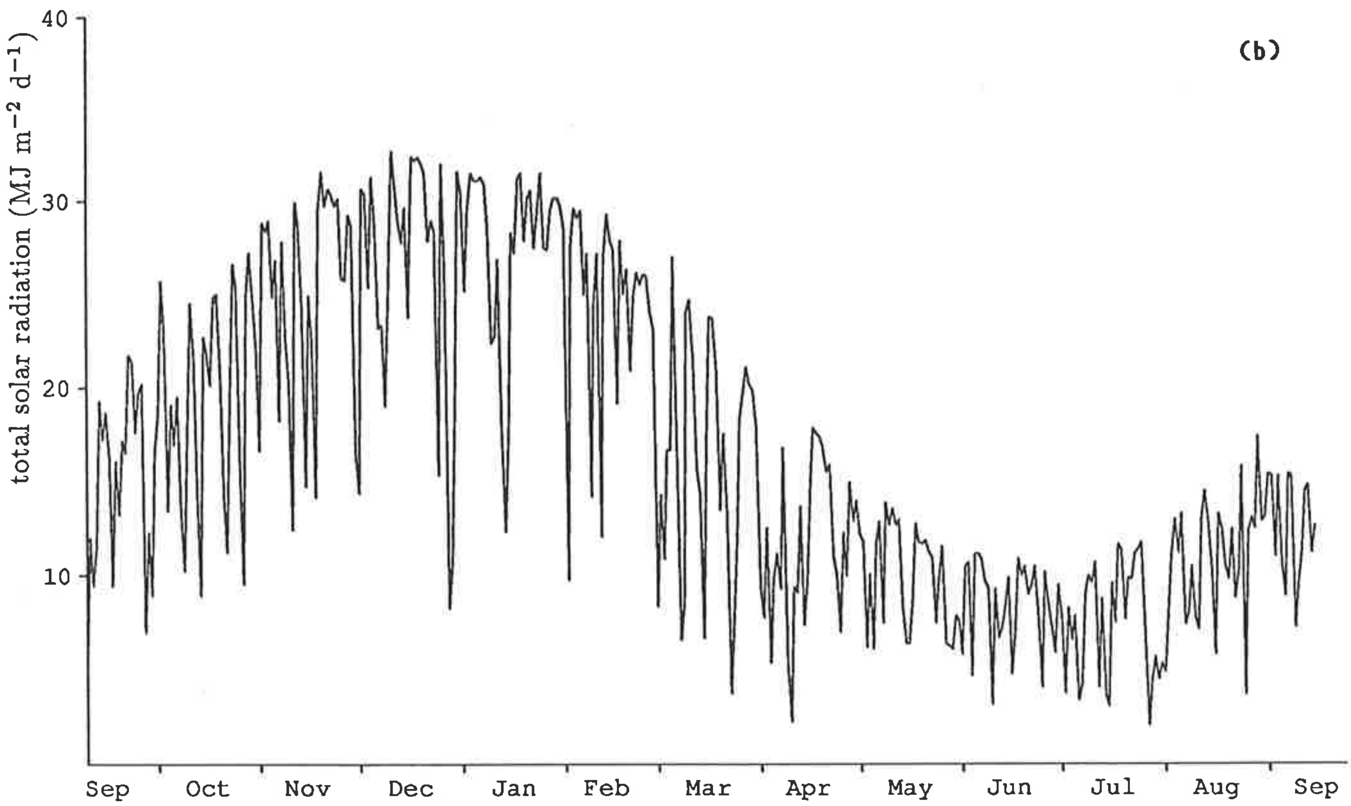


Figure 3.7 Daily total solar radiation (MJ m^{-2} d^{-1}) in Adelaide during (a) 1981/1982 and (b) 1982/1983.

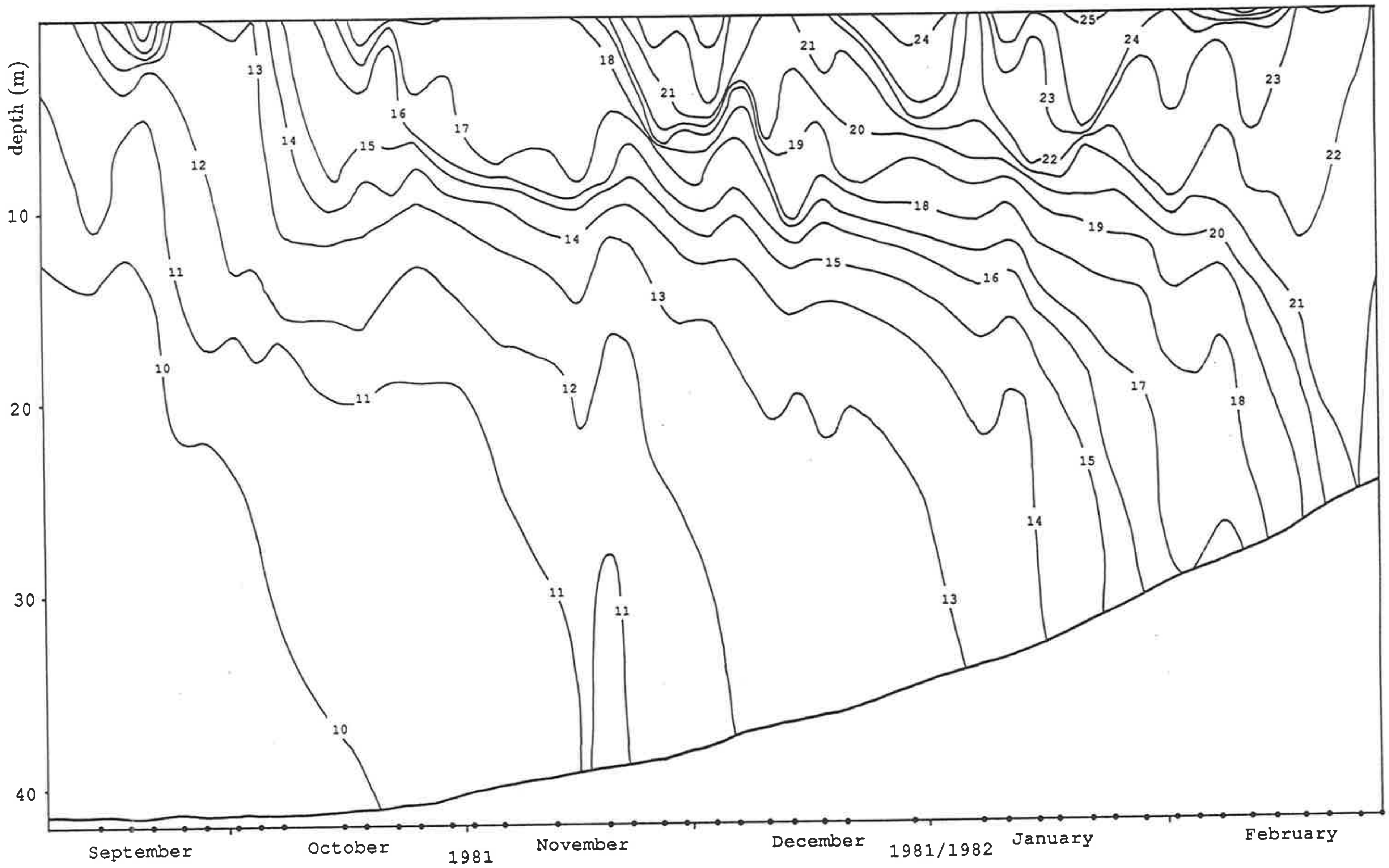
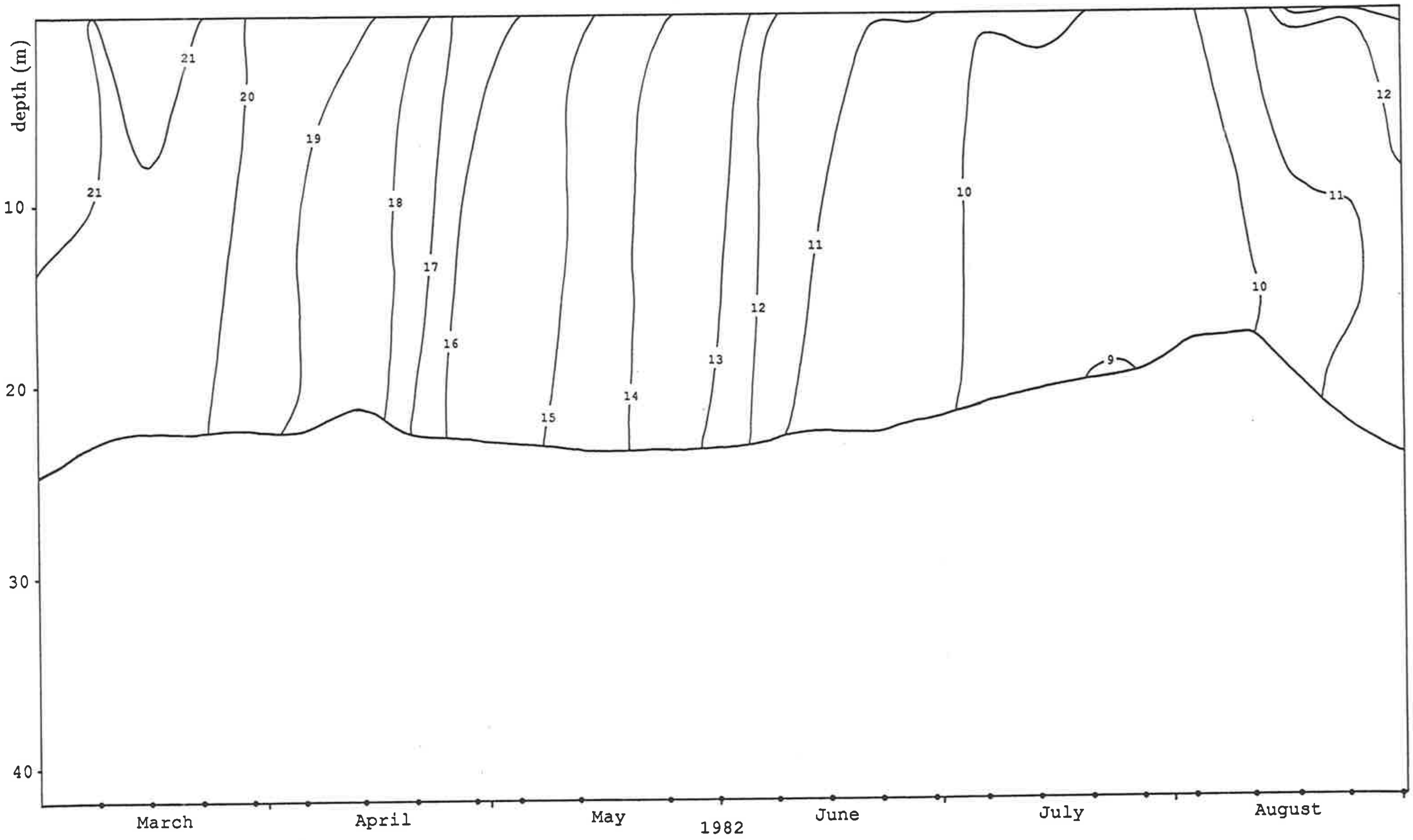


Figure 3.8 Water temperature variation with depth in Mt Bold Reservoir during the study period. Temperature profiles were taken at metre intervals on the dates indicated by dots. Isotherms are in °C.



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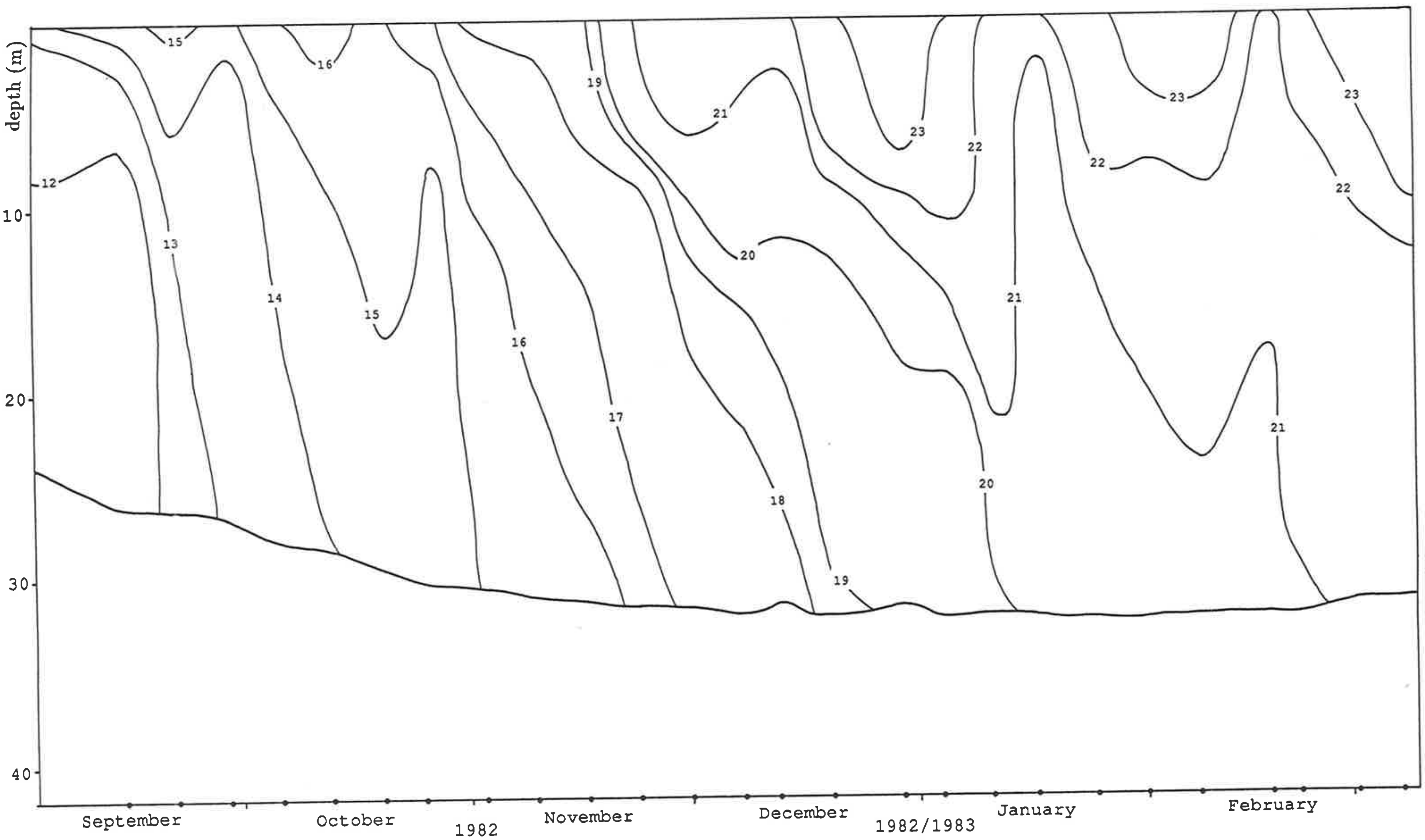

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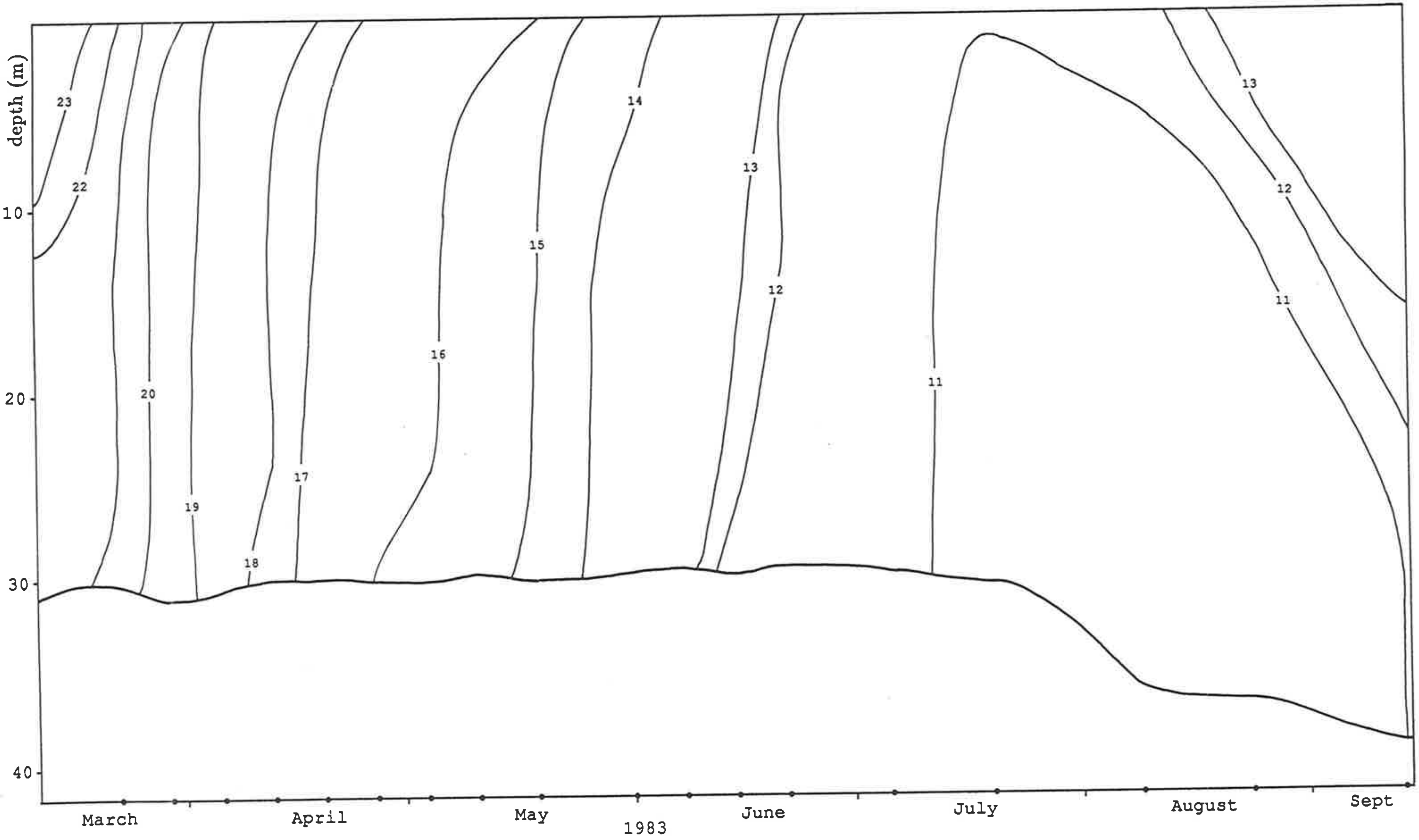

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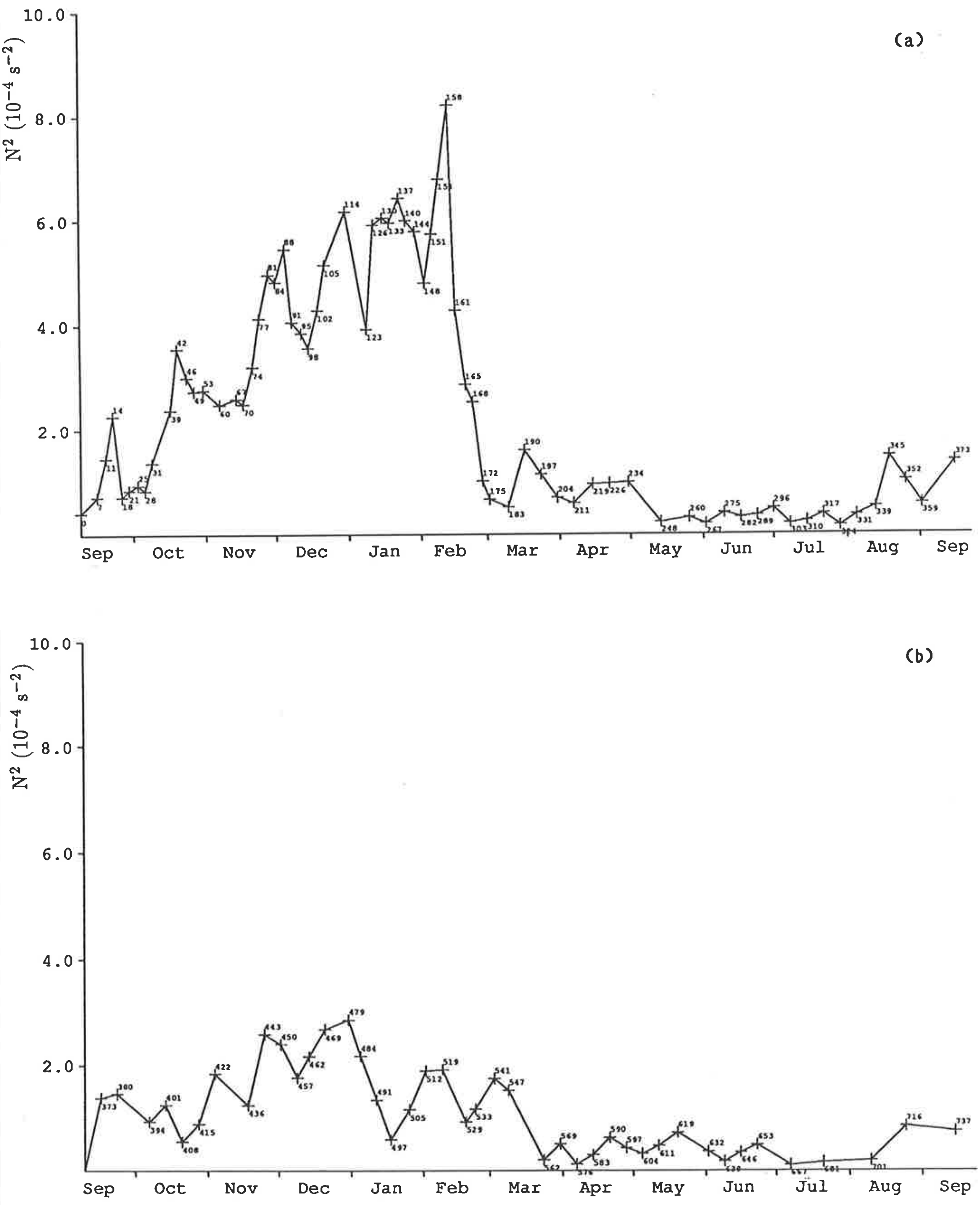


Figure 3.9 Brunt-Vaisala frequency [N^2] (10^{-4} s^{-2}) of the whole water column in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

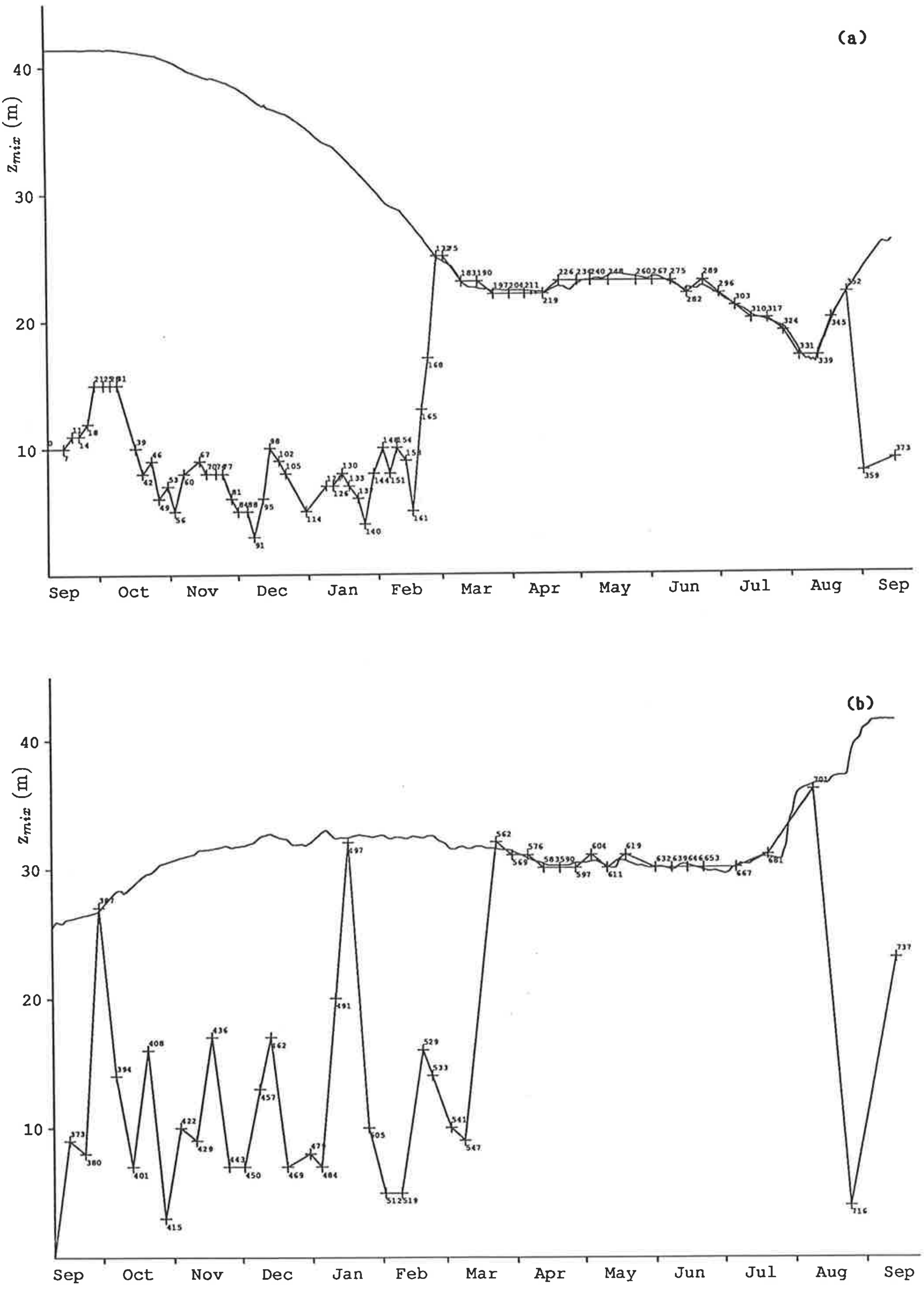


Figure 3.10 Mixed depth [z_{mix}] (m) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The maximum depth of the reservoir throughout the study period is shown.

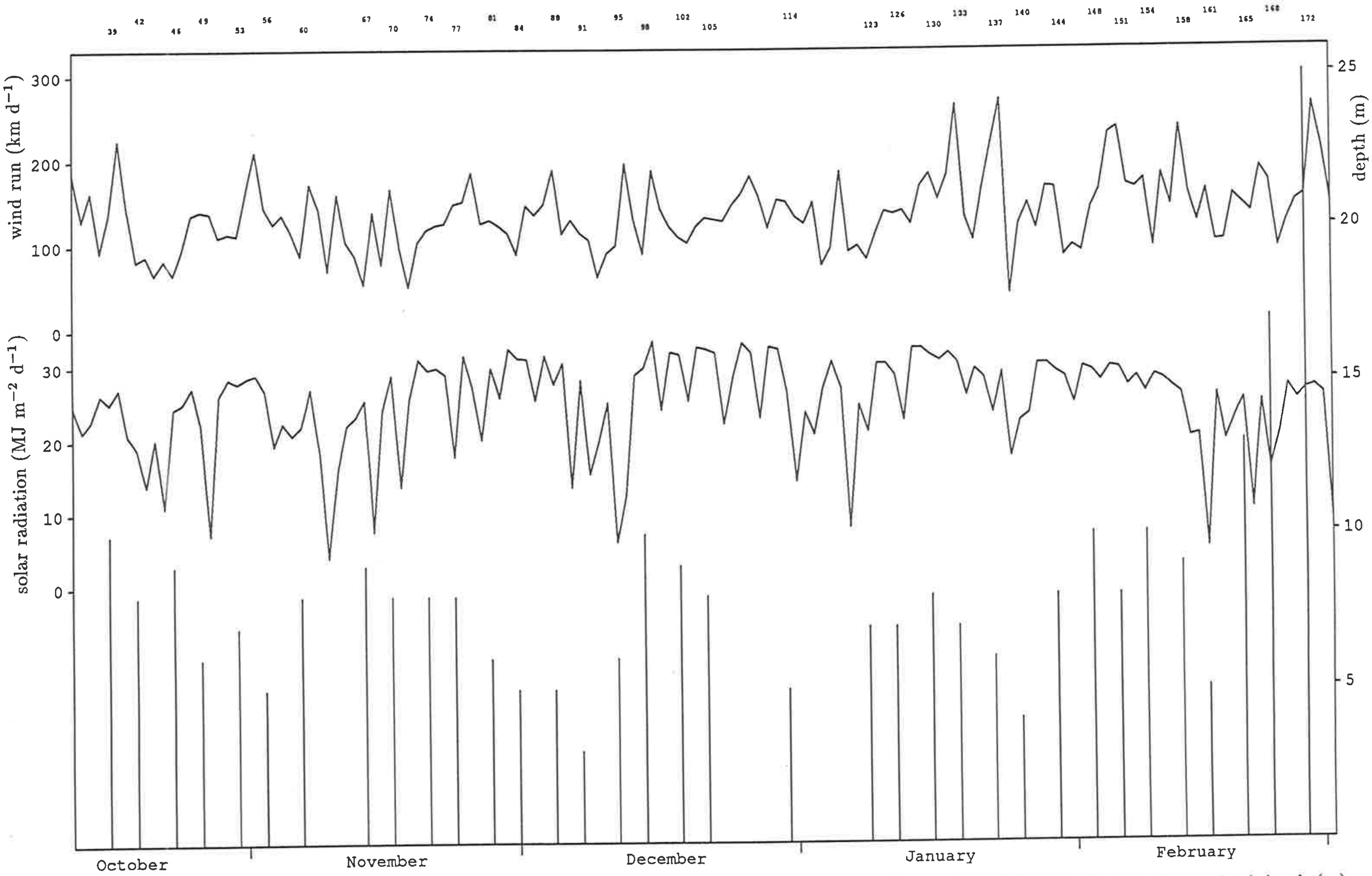


Figure 3.11a Fluctuations in daily wind run (km d^{-1}) [upper line], daily total solar radiation (MJ m^{-2} d^{-1}) [middle line], and the mixed depth (m) [lower vertical bars] during the 1981/1982 stratified period.

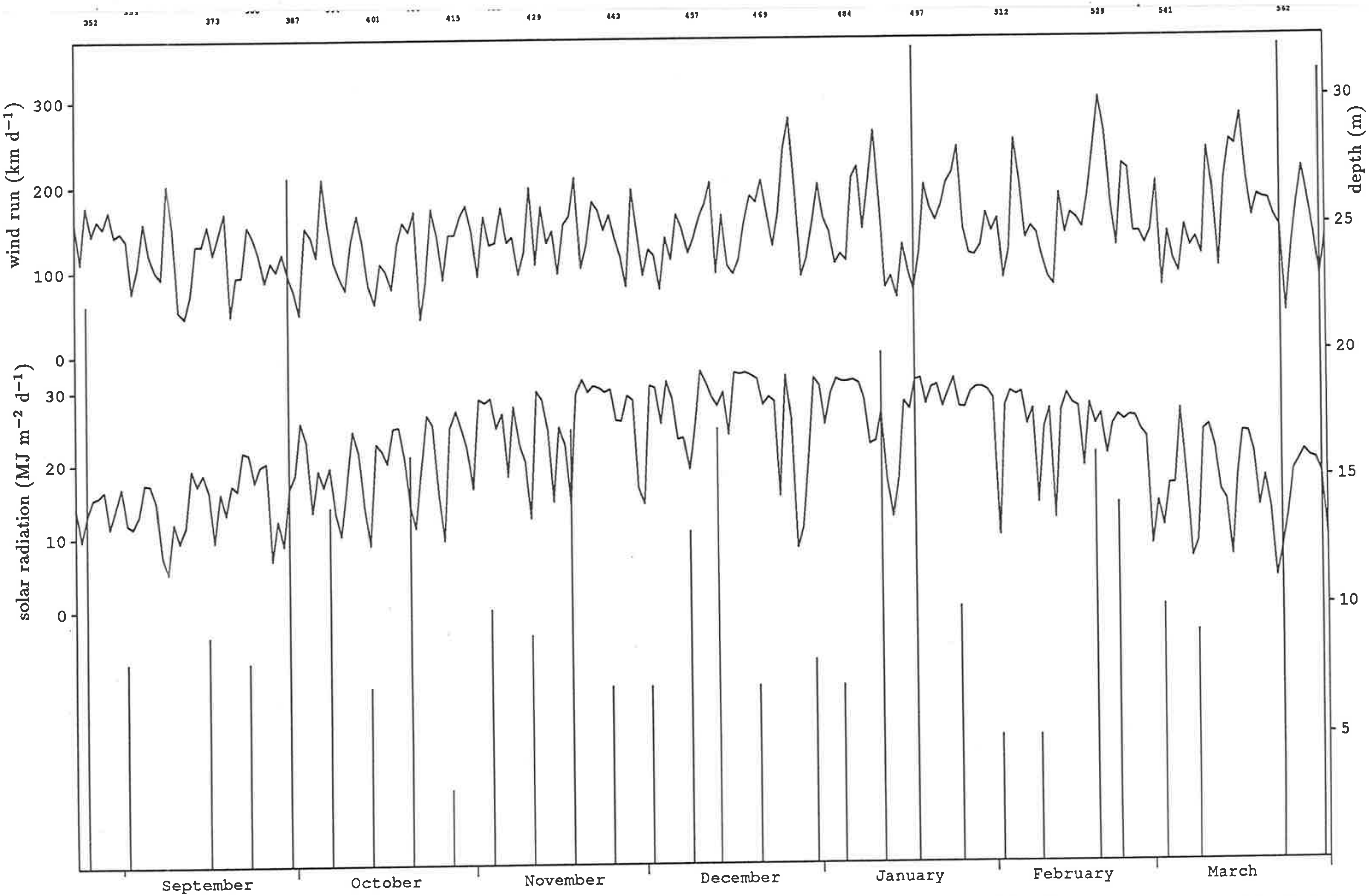


Figure 3.11b Fluctuations in daily wind run (km d^{-1}) [upper line], daily total solar radiation (MJ m^{-2} d^{-1}) [middle line], and the mixed depth (m) [lower vertical bars] during the 1982/1983 stratified period.

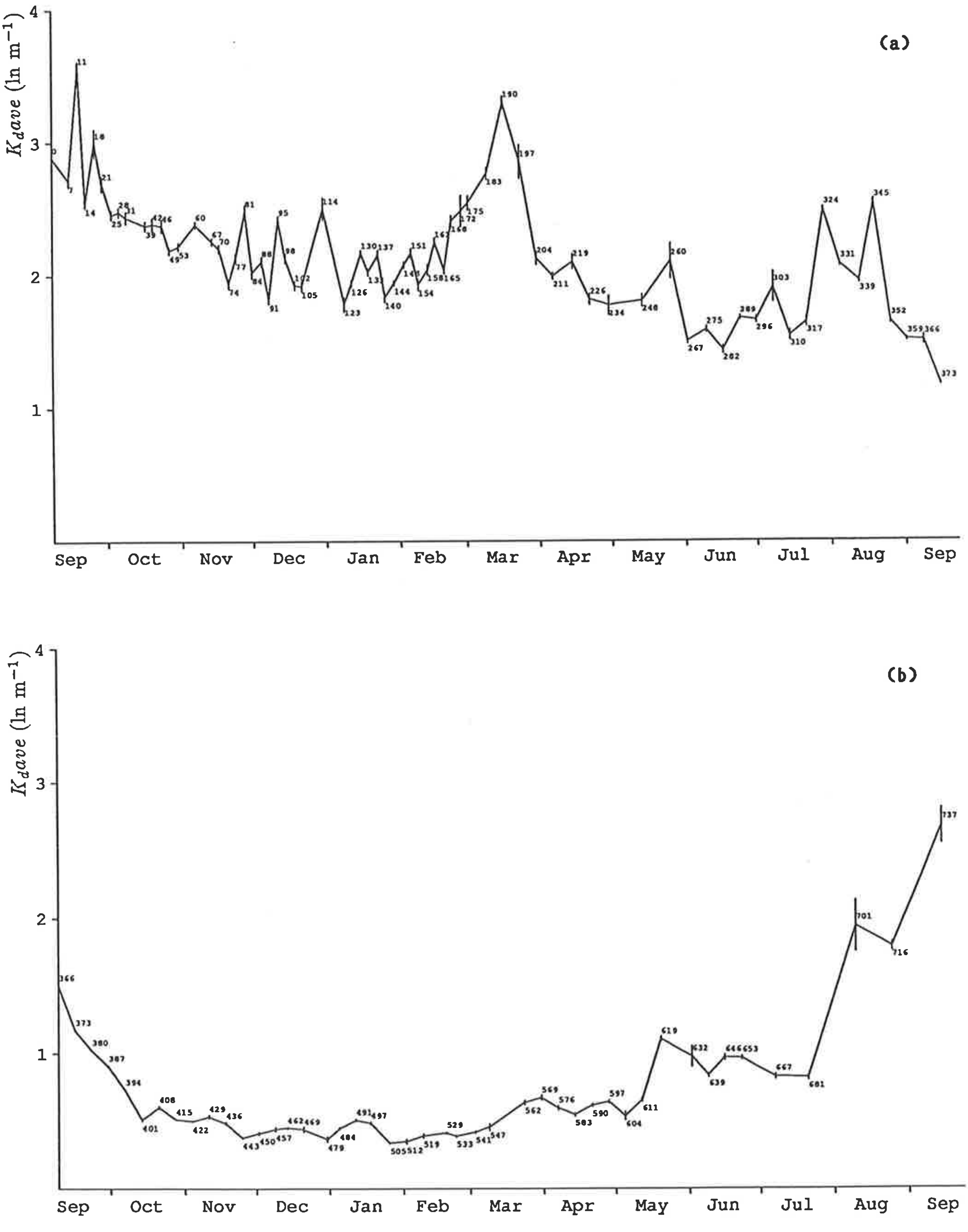


Figure 3.12 Average vertical attenuation coefficient [$K_d ave$] (ln m^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. Vertical bars are standard errors.

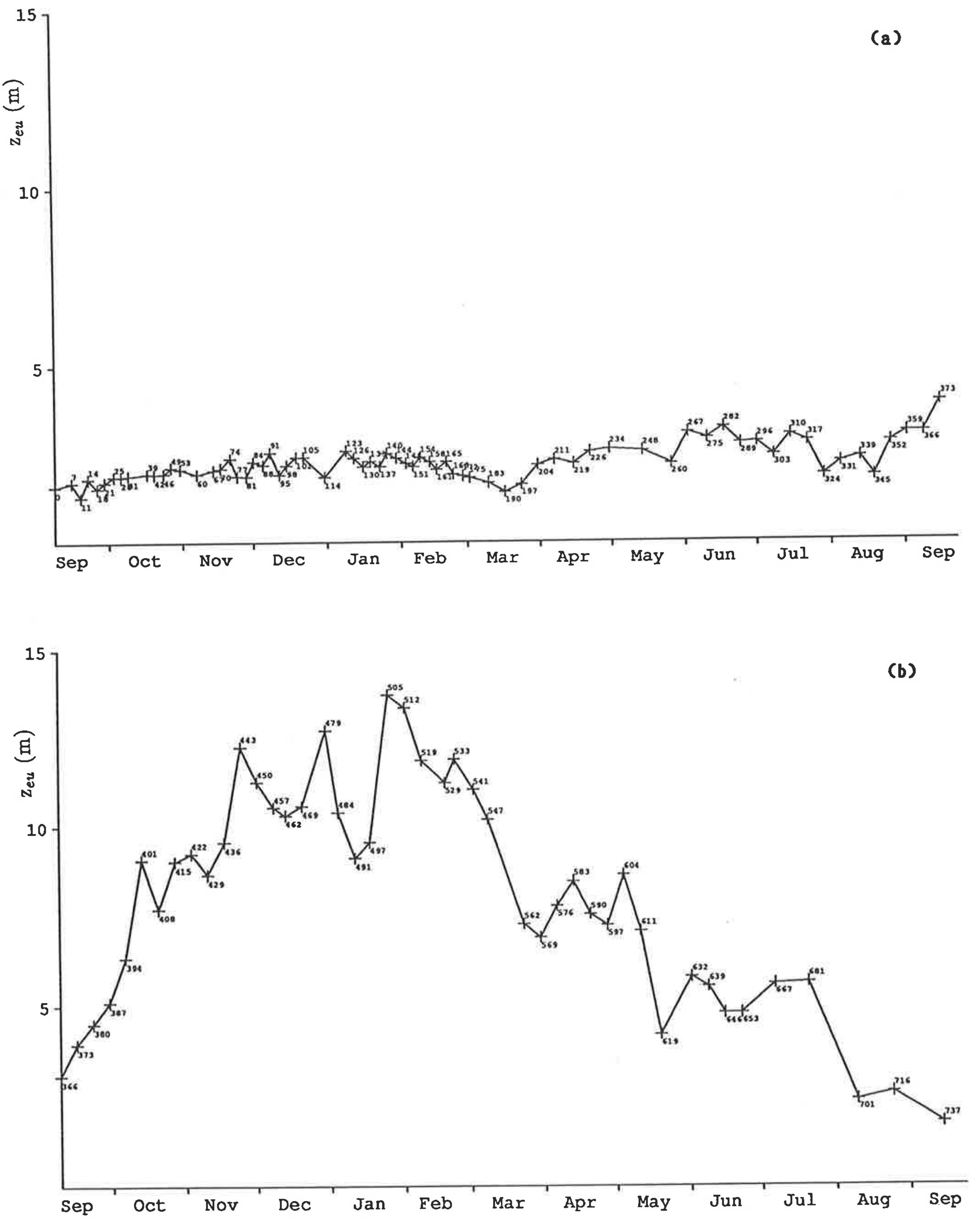
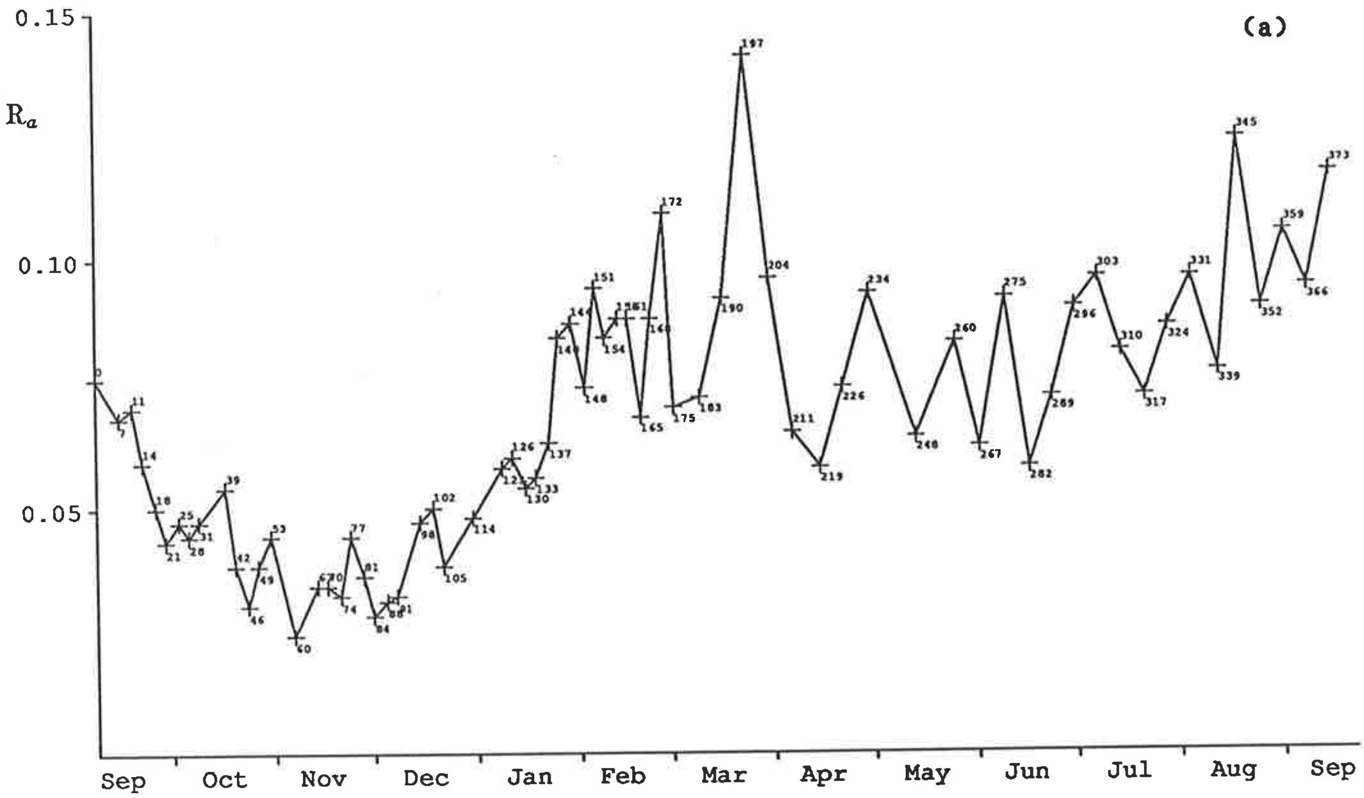


Figure 3.13 Euphotic depth [z_{eu}] (m) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.



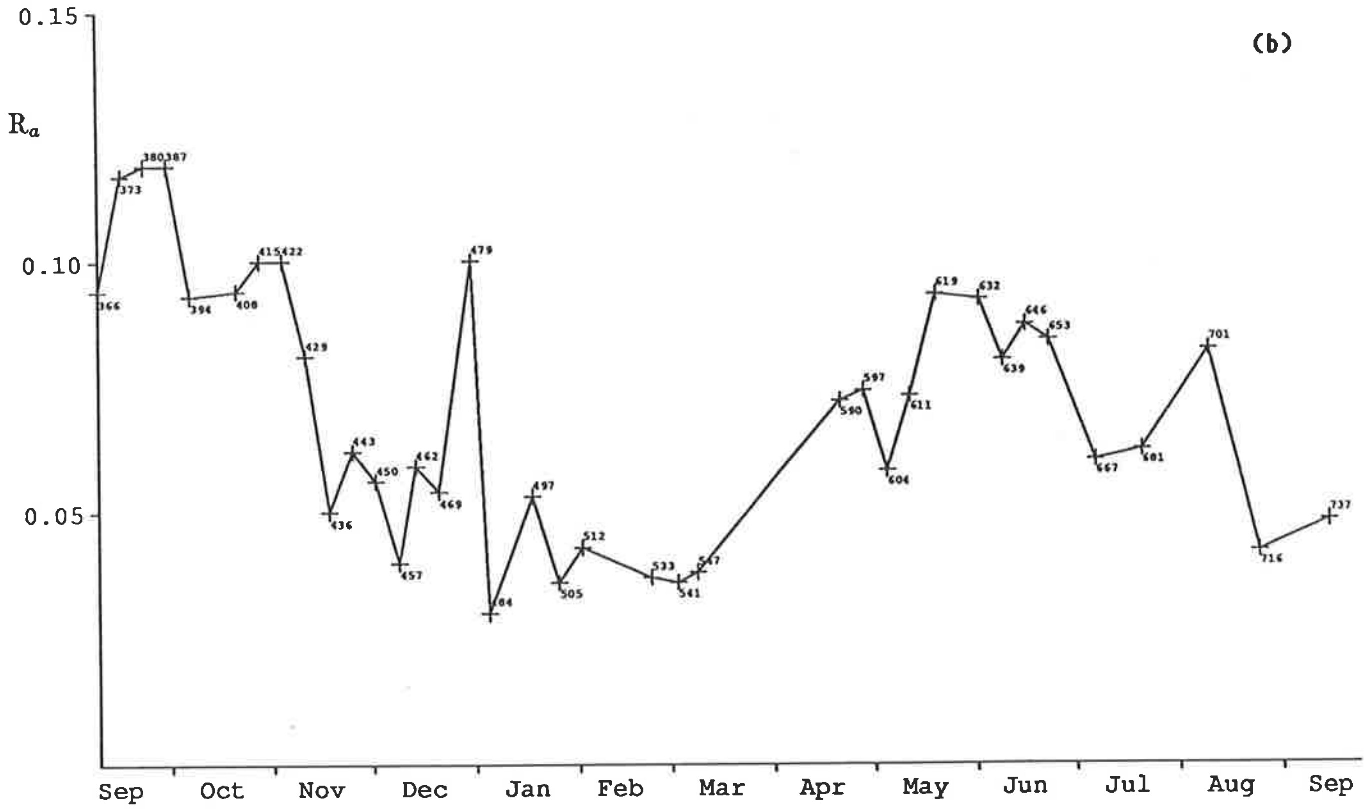


Figure 3.14 Asymptotic reflectance [R_a] in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

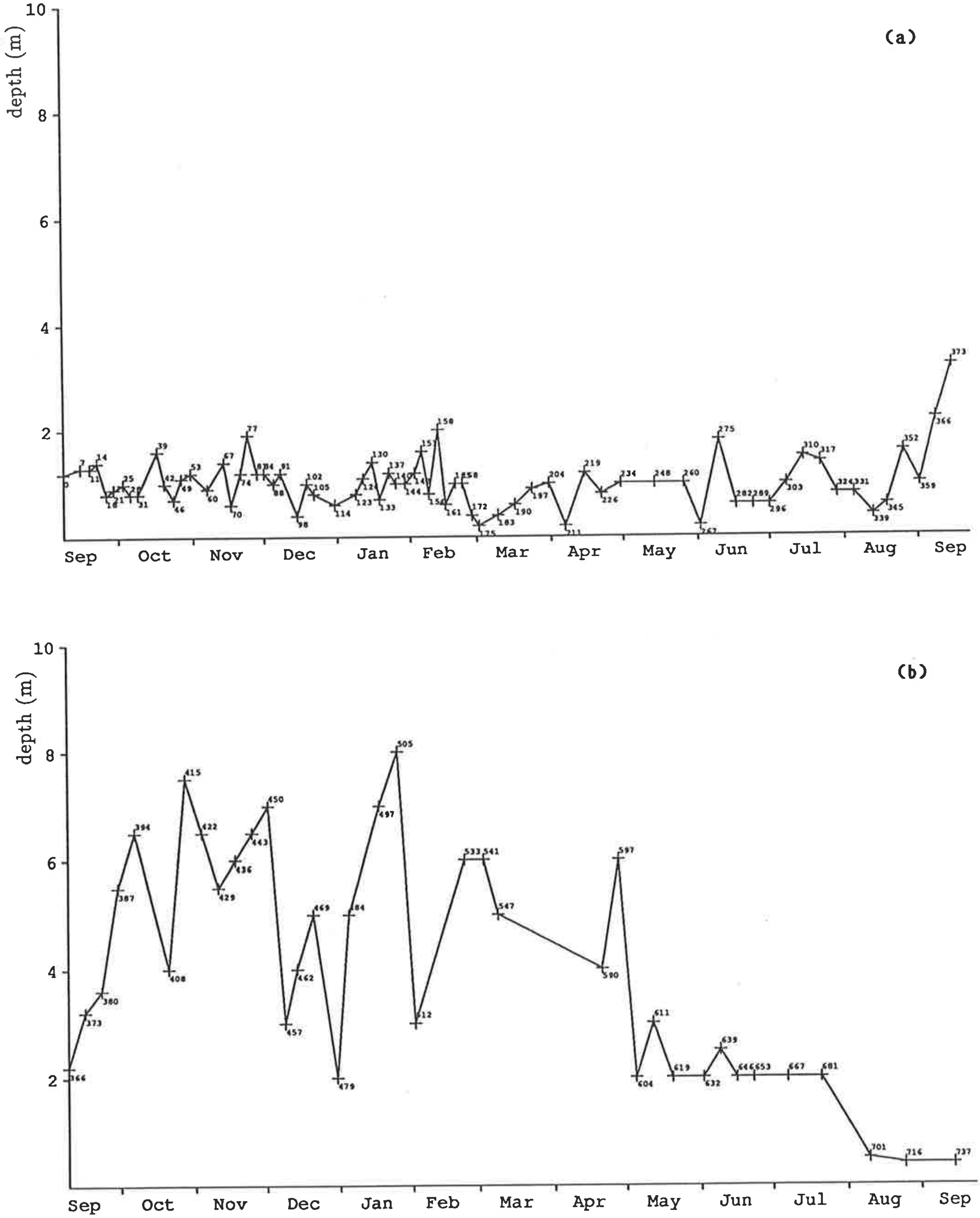


Figure 3.15 Depth of asymptotic reflectance (m) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

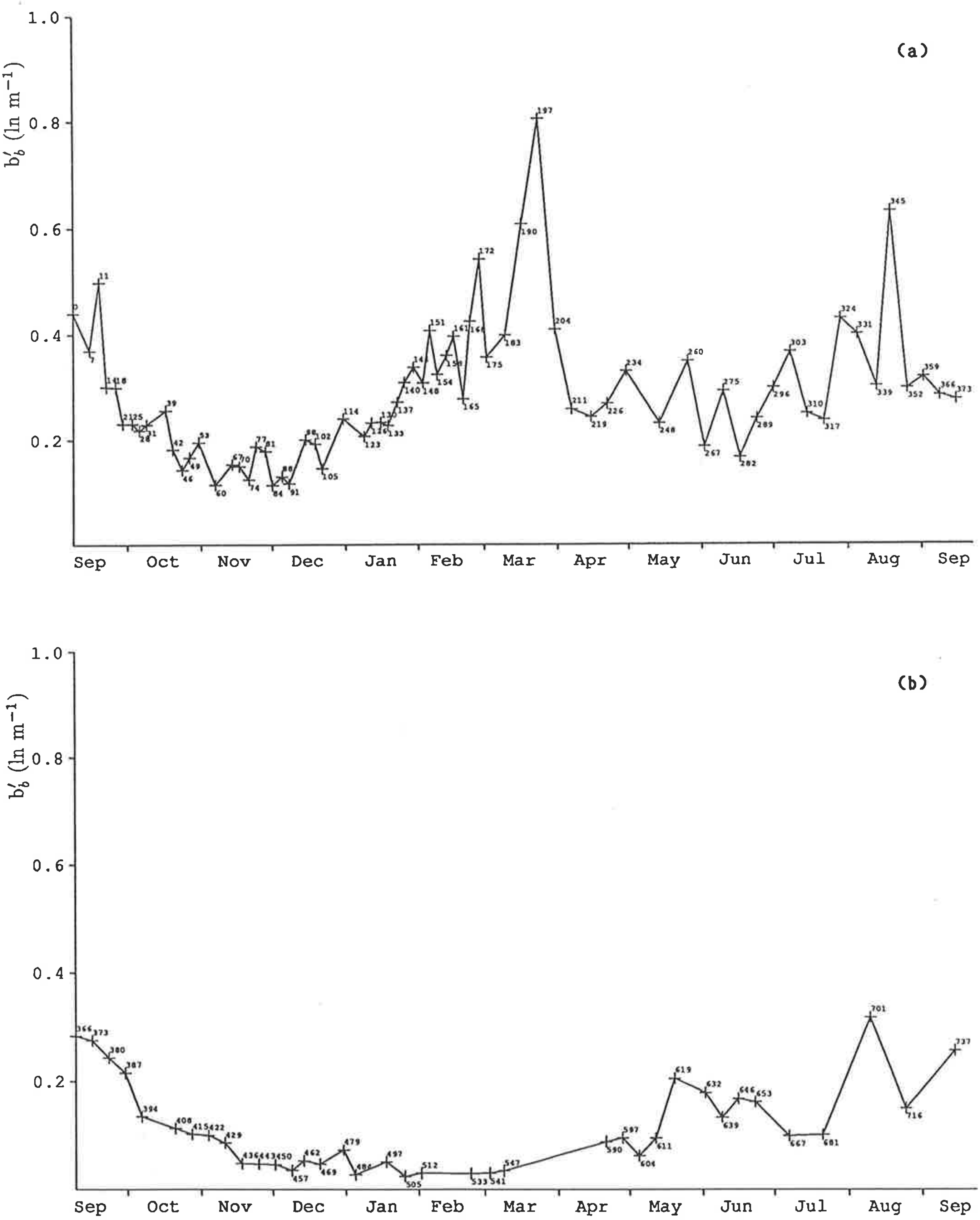


Figure 3.16 Asymptotic backscattering coefficient [b'_b] (ln m^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

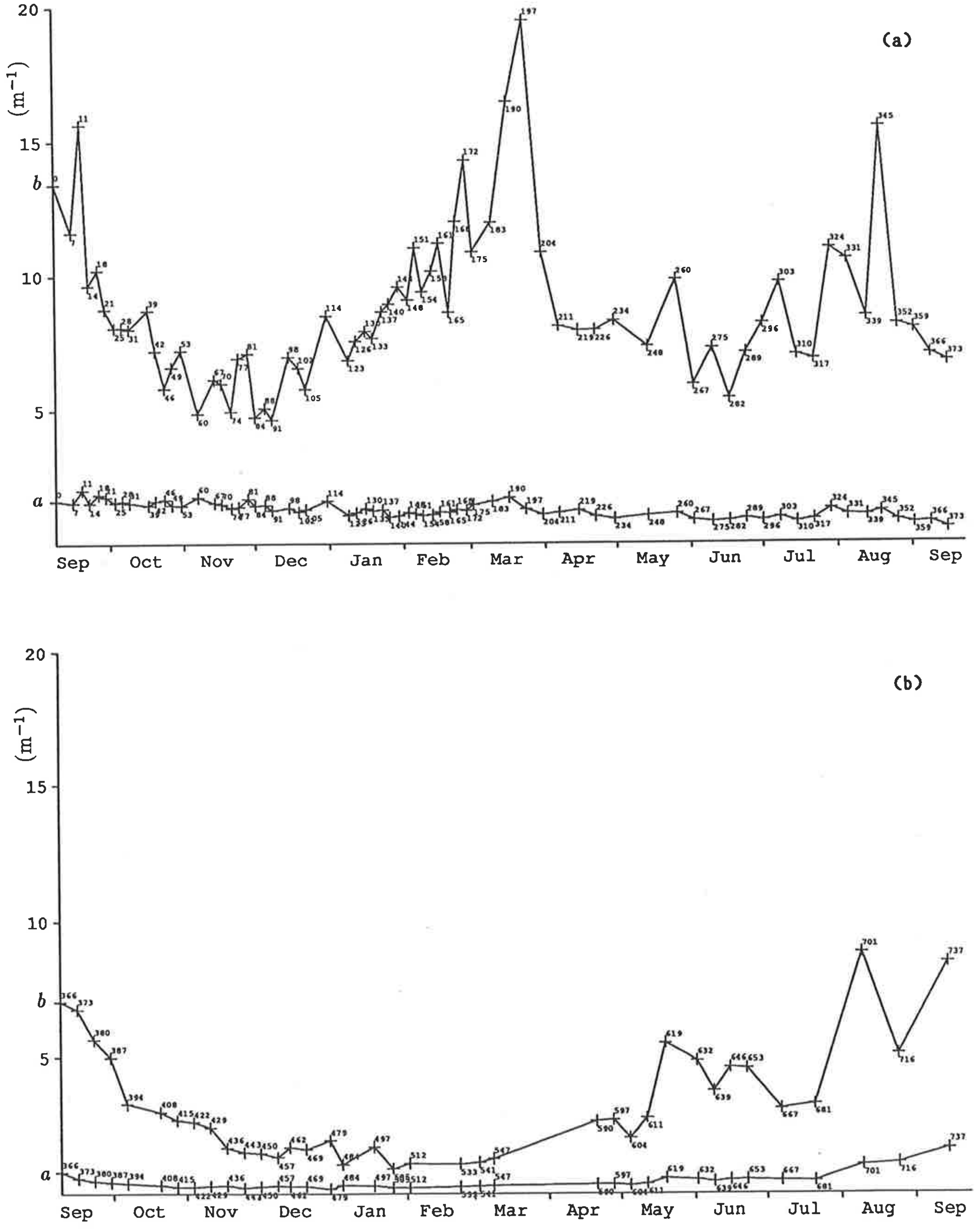


Figure 3.17 Absorption coefficient [a] (m^{-1}) [lower line] and scattering coefficient [b] (m^{-1}) [upper line] in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

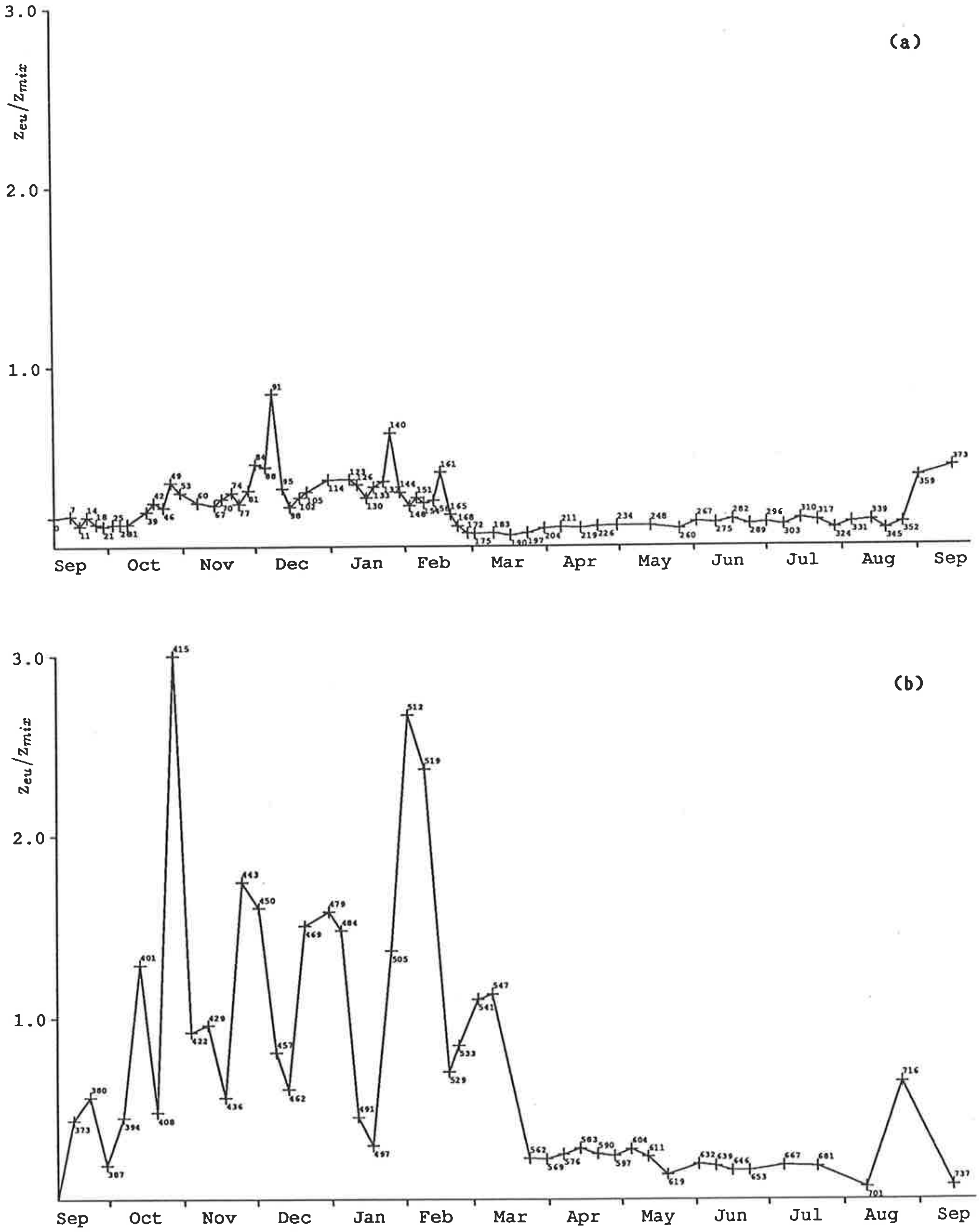


Figure 3.18 Euphotic depth to mixed depth ratio in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

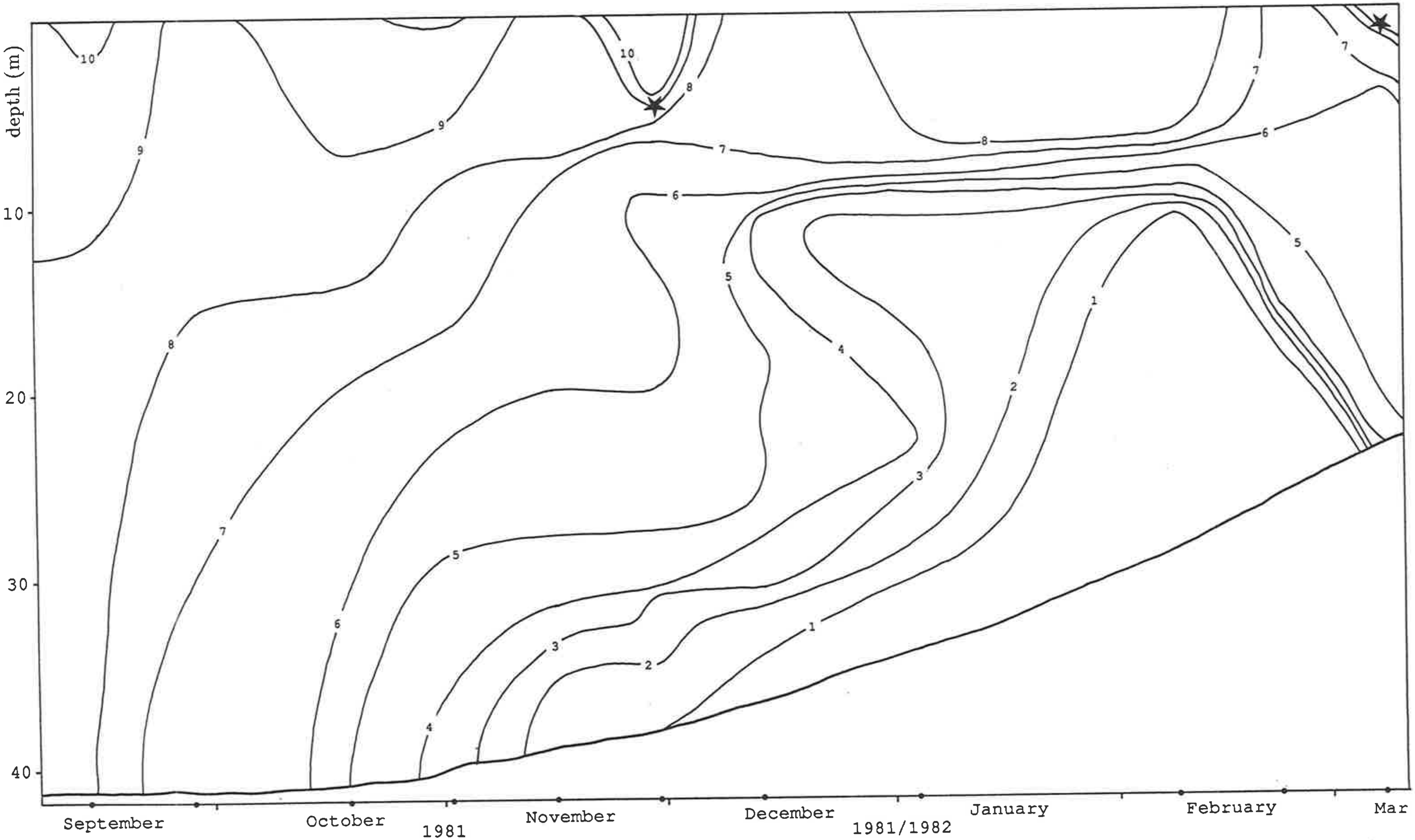
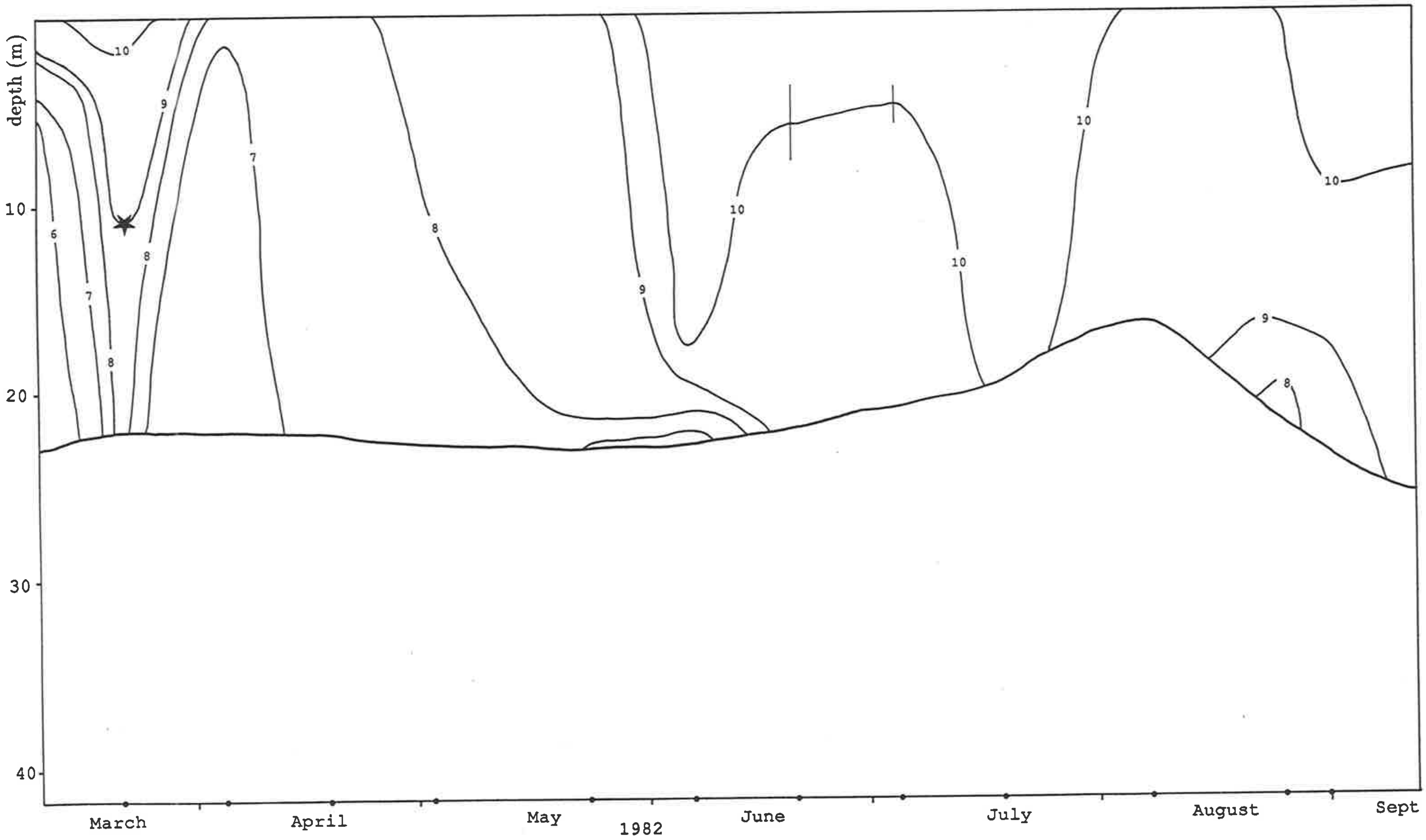


Figure 3.19 Dissolved oxygen variation with depth in Mt Bold Reservoir during the study period. Dissolved oxygen profiles were taken at metre intervals on the dates indicated by dots. Isopleths are at intervals of 1 mg O_2 l^{-1}. Supersaturation is down to the star when present.



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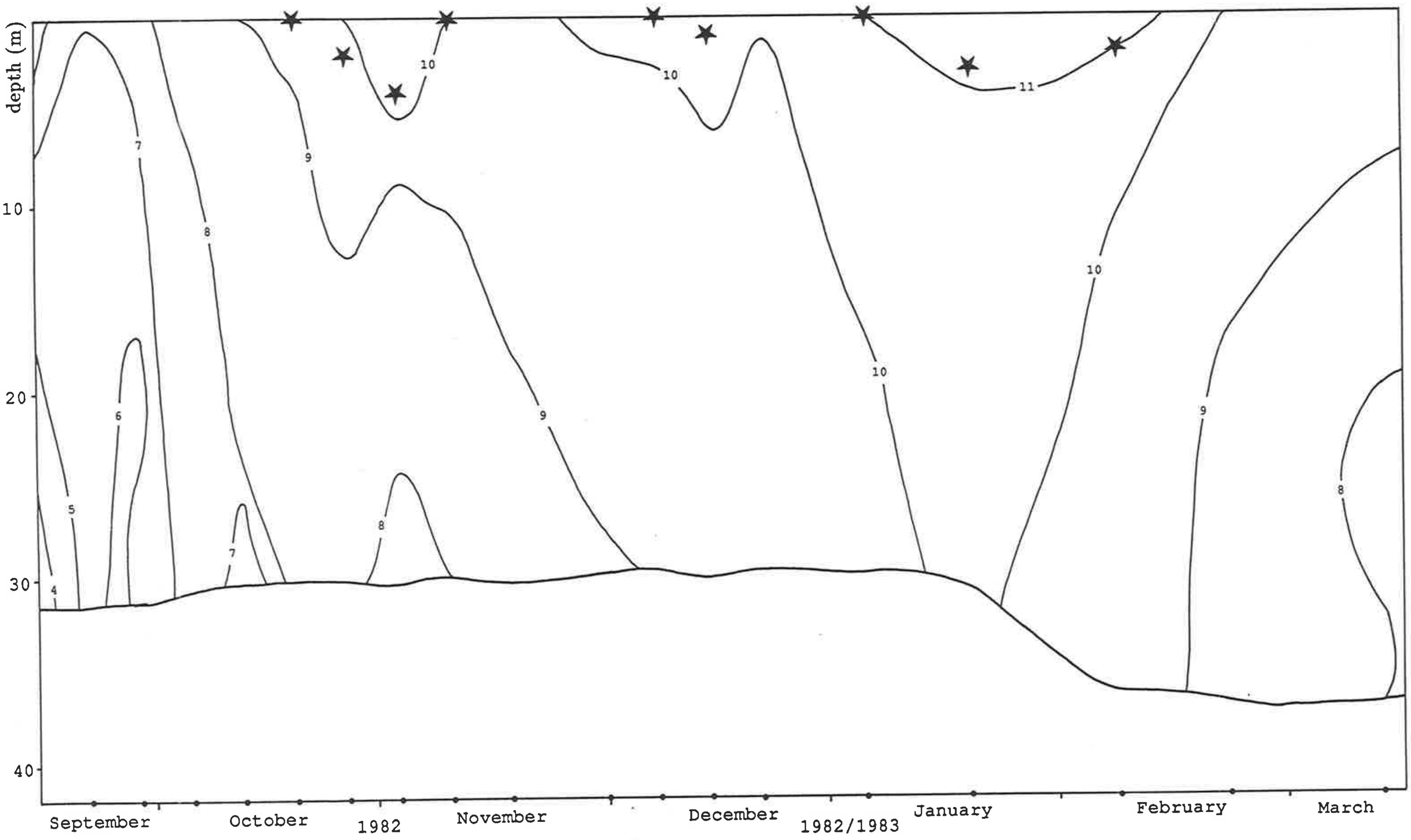

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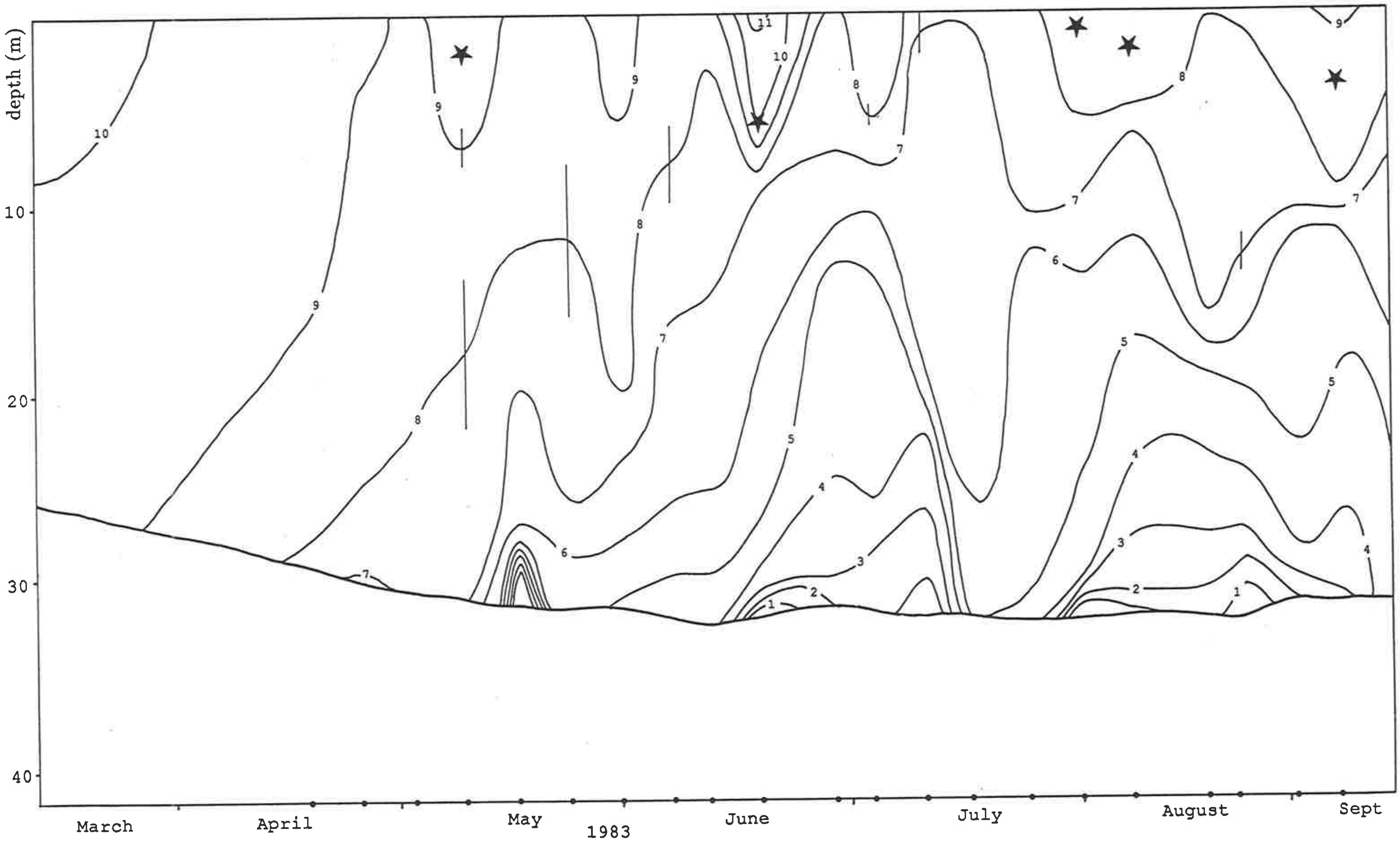

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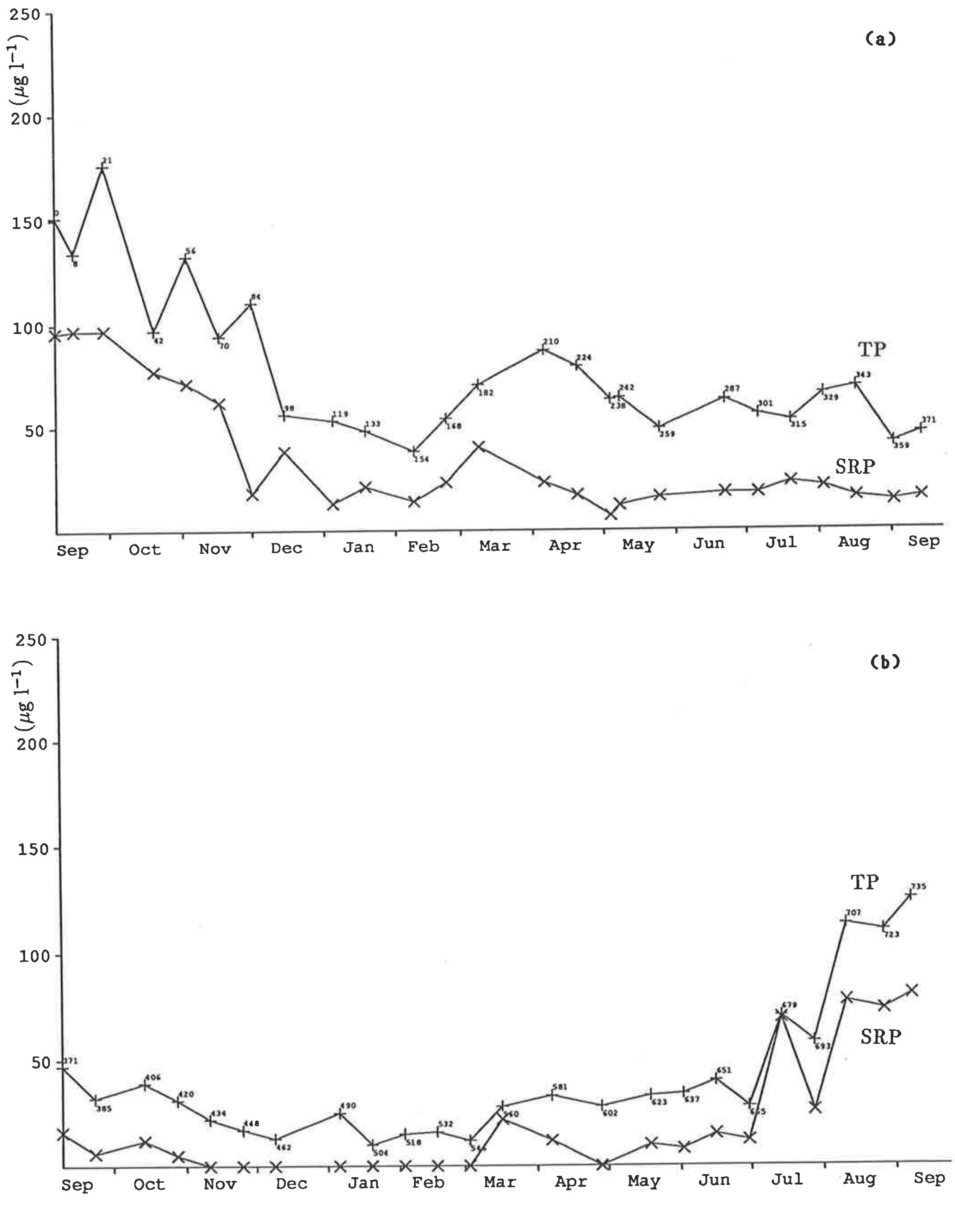


Figure 3.20.1 Total phosphorus [TP] ($\mu g\ l^{-1}$) [upper line] and soluble reactive phosphorus [SRP] ($\mu g\ l^{-1}$) [lower line] at the surface of Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

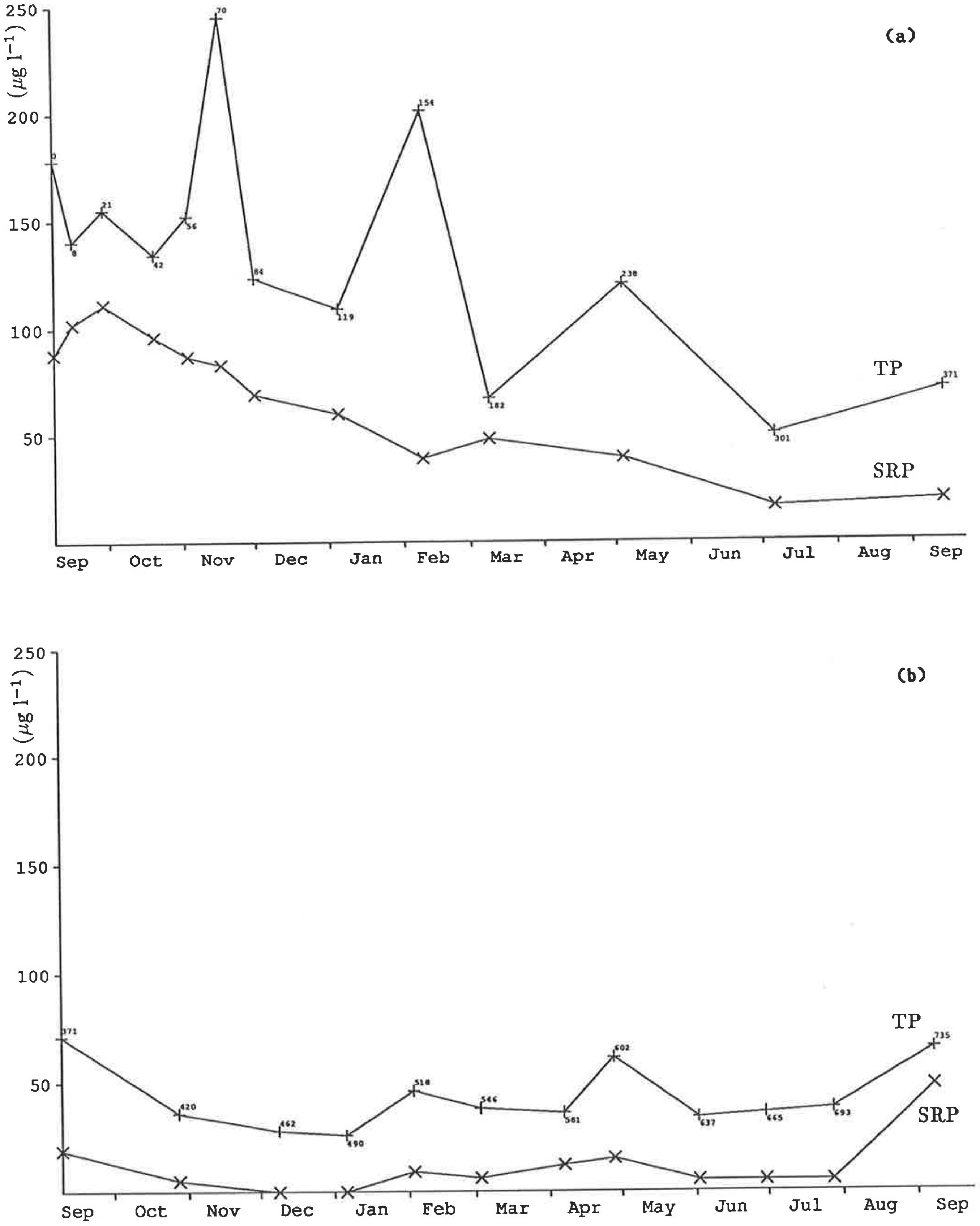


Figure 3.20.2 Total phosphorus [TP] ($\mu g\ l^{-1}$) [upper line] and soluble reactive phosphorus [SRP] ($\mu g\ l^{-1}$) [lower line] at 30 m depth in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

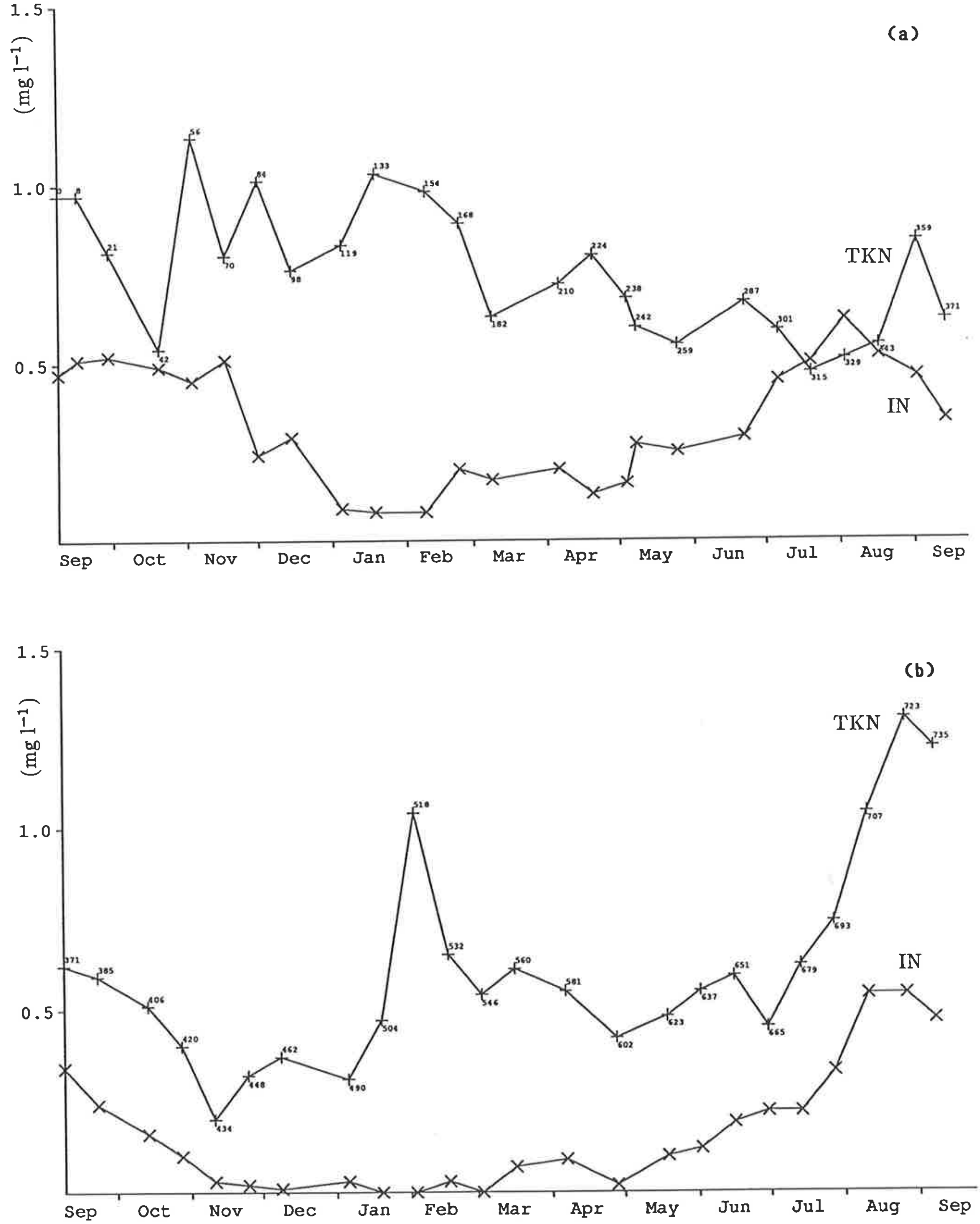


Figure 3.21.1 Total Kjeldahl nitrogen [TKN] (mg l^{-1}) [upper line] and inorganic nitrogen [IN] (mg l^{-1}) [lower line] at the surface of Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

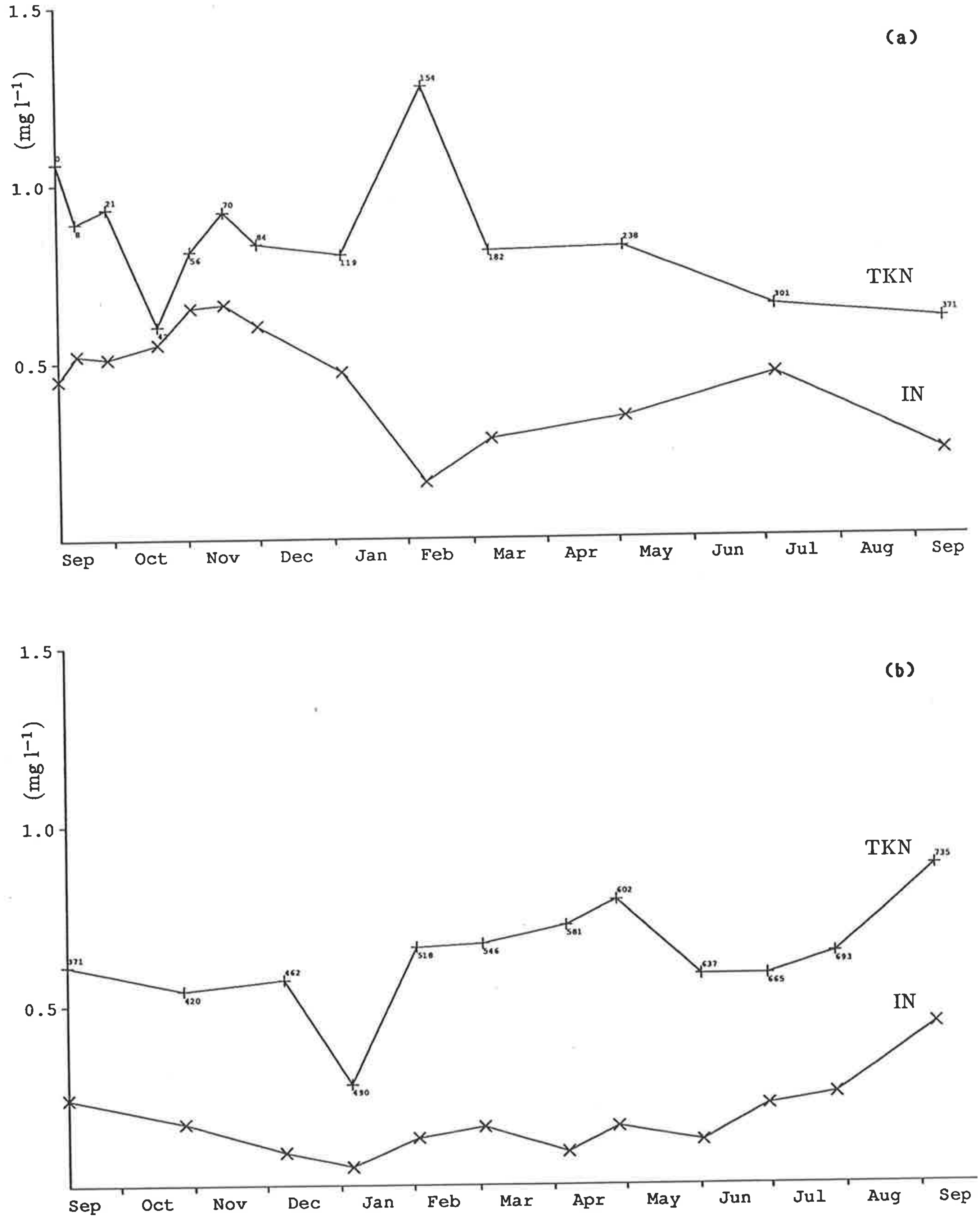


Figure 3.21.2 Total Kjeldahl nitrogen [TKN] (mg l^{-1}) [upper line] and inorganic nitrogen [IN] (mg l^{-1}) [lower line] at 30 m depth in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

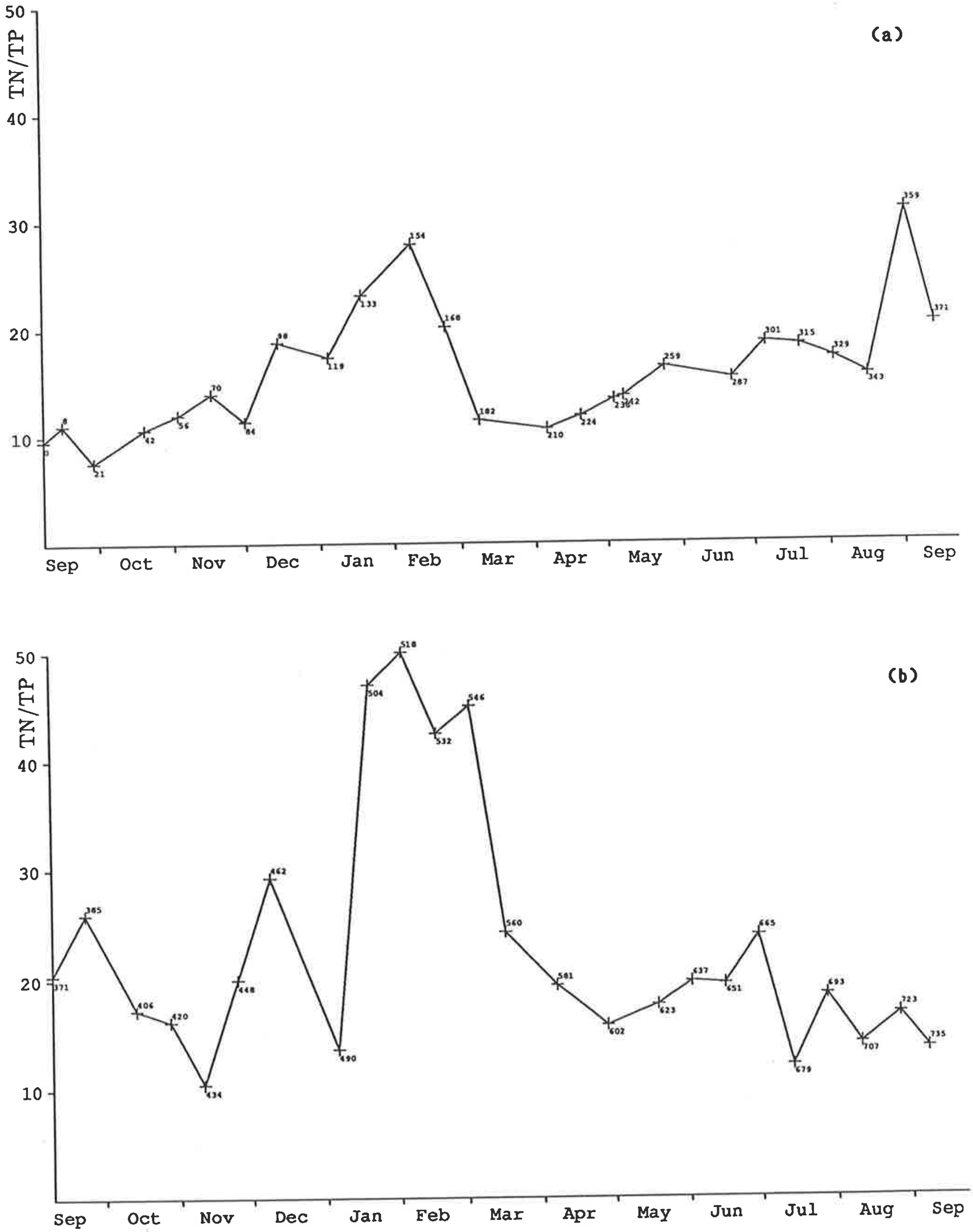


Figure 3.22.1 TN/TP ratio by weight at the surface of Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

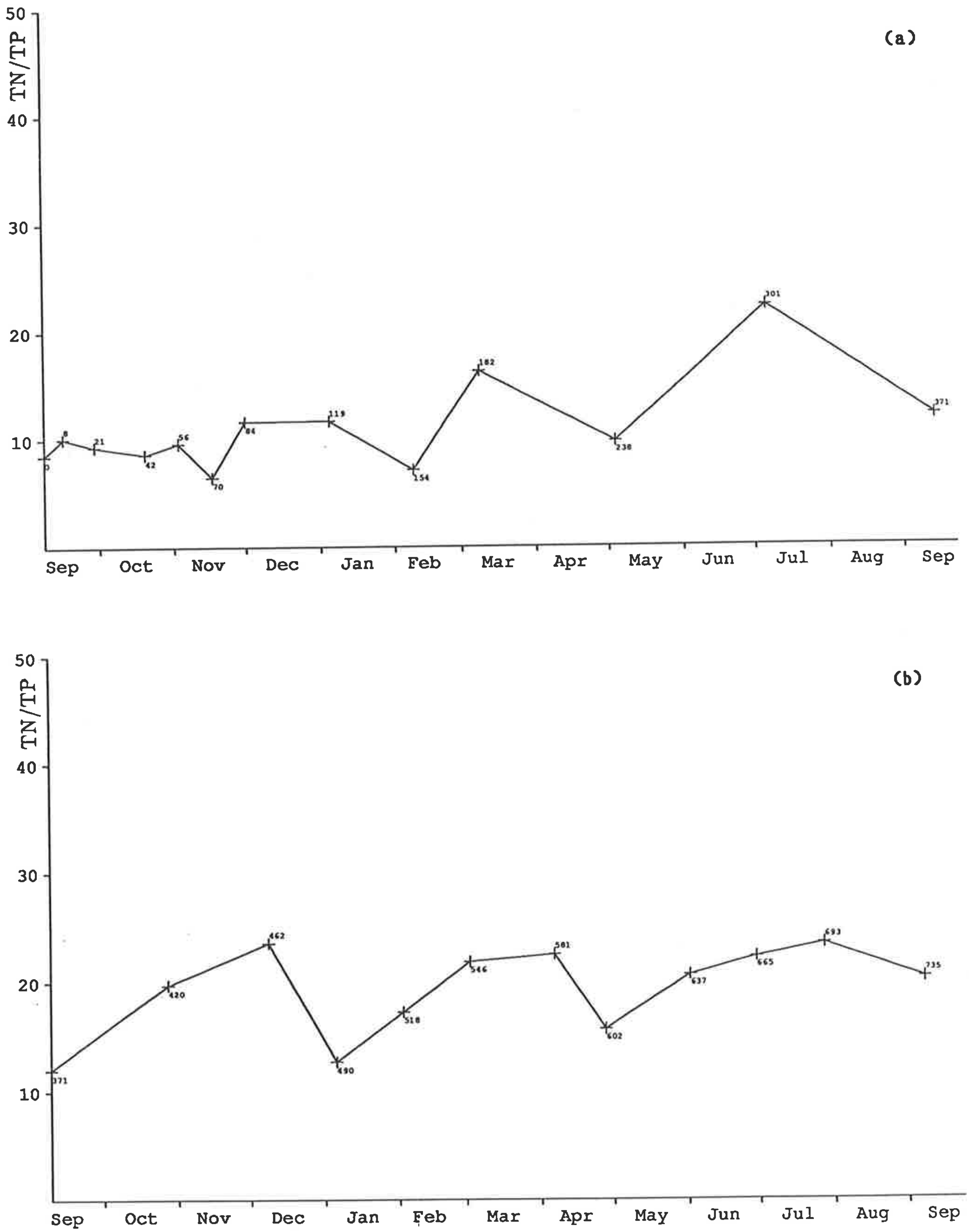


Figure 3.22.2 TN/TP ratio by weight at 30 m depth in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

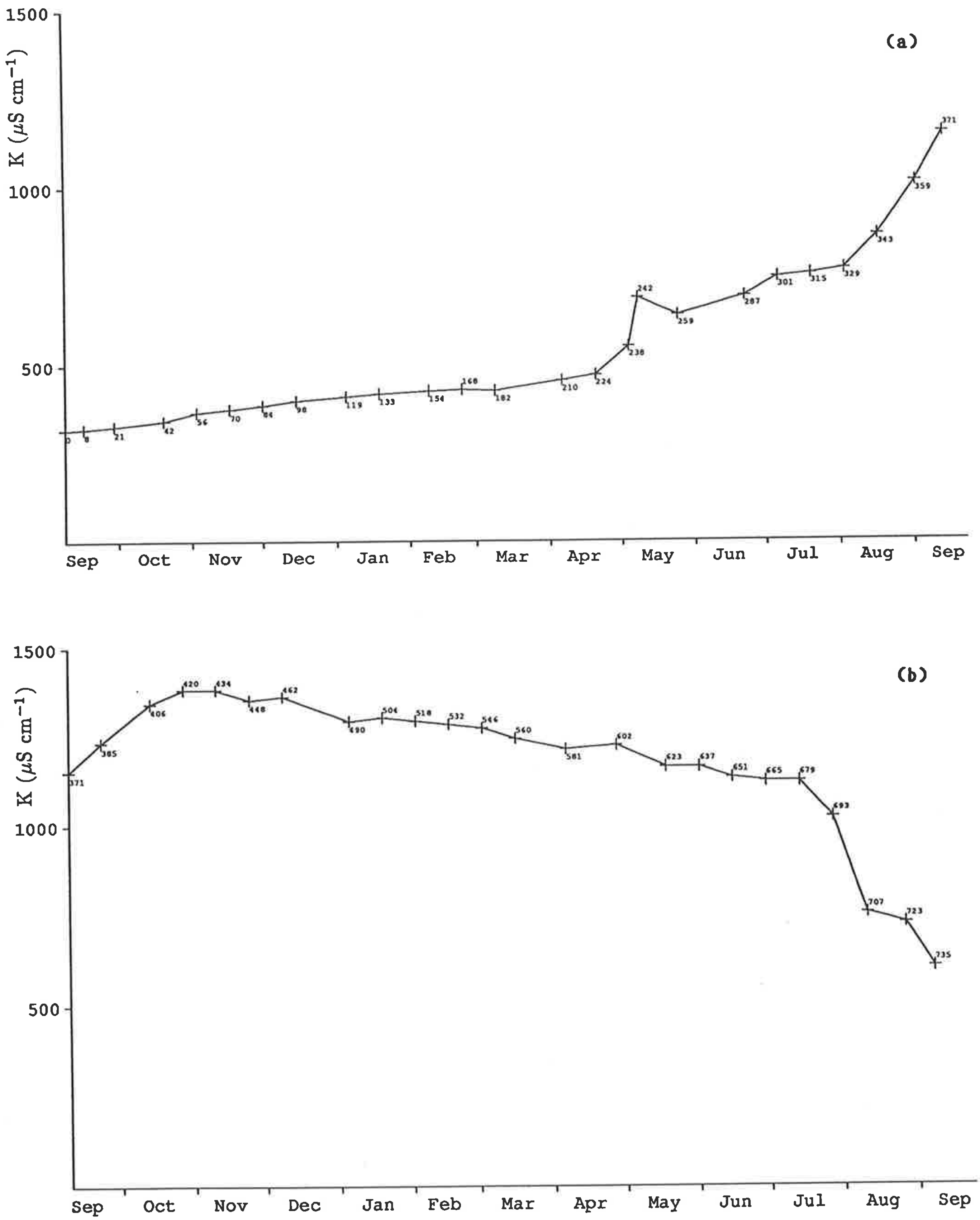


Figure 3.23.1 Conductivity [K] (μS cm^{-1}) at the surface of Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

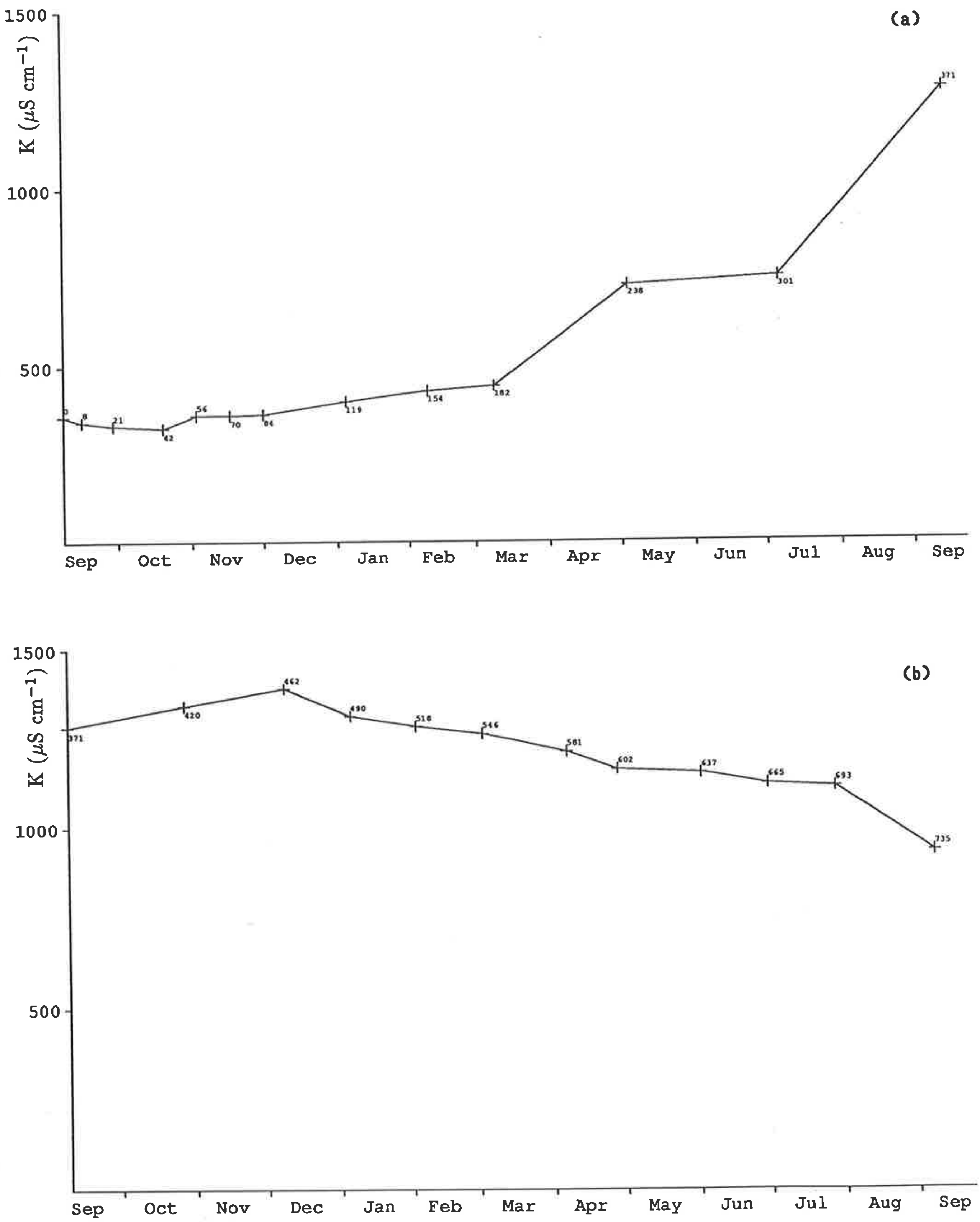


Figure 3.23.2 Conductivity [K] ($\mu S\ cm^{-1}$) at 30 m depth in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

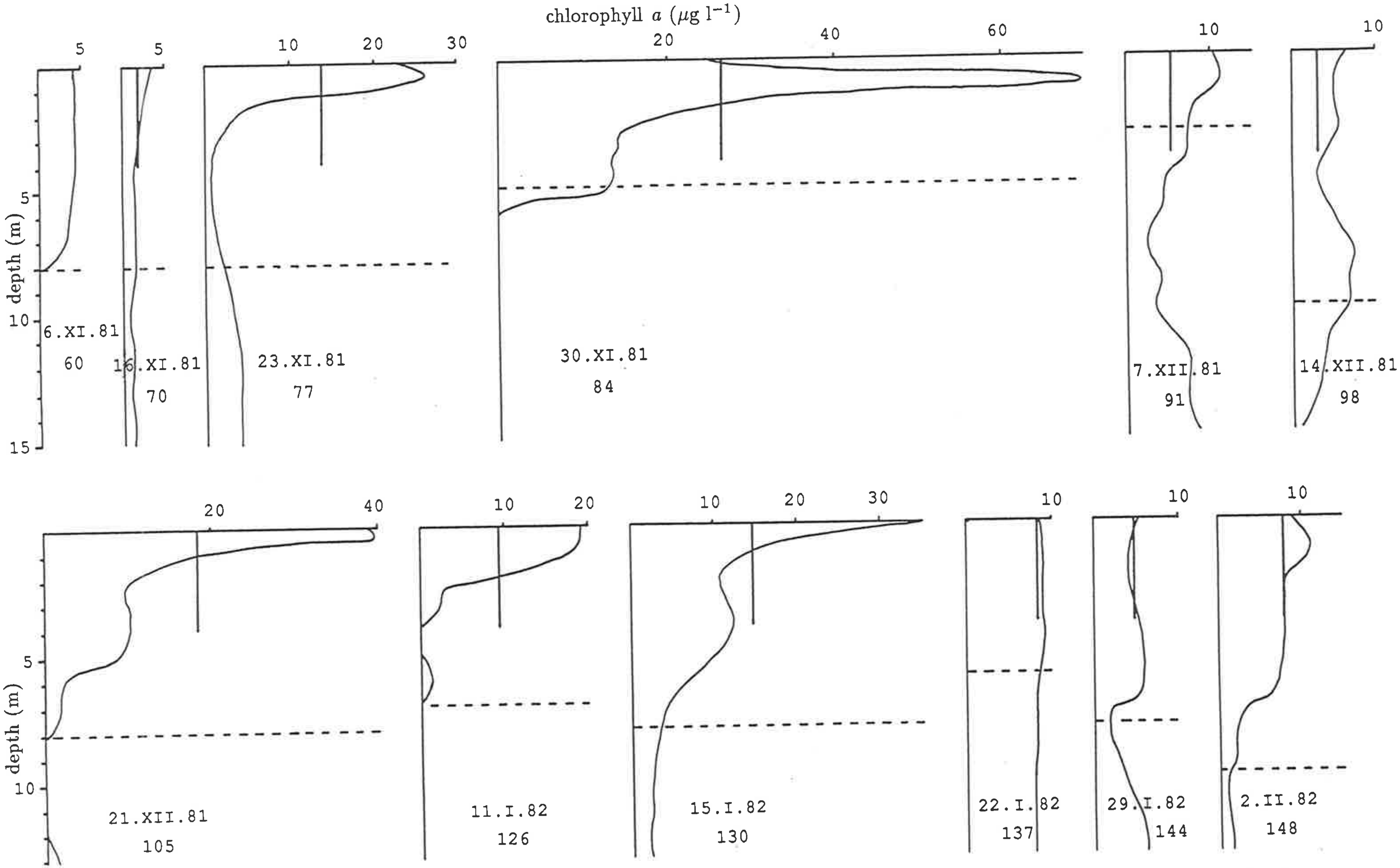
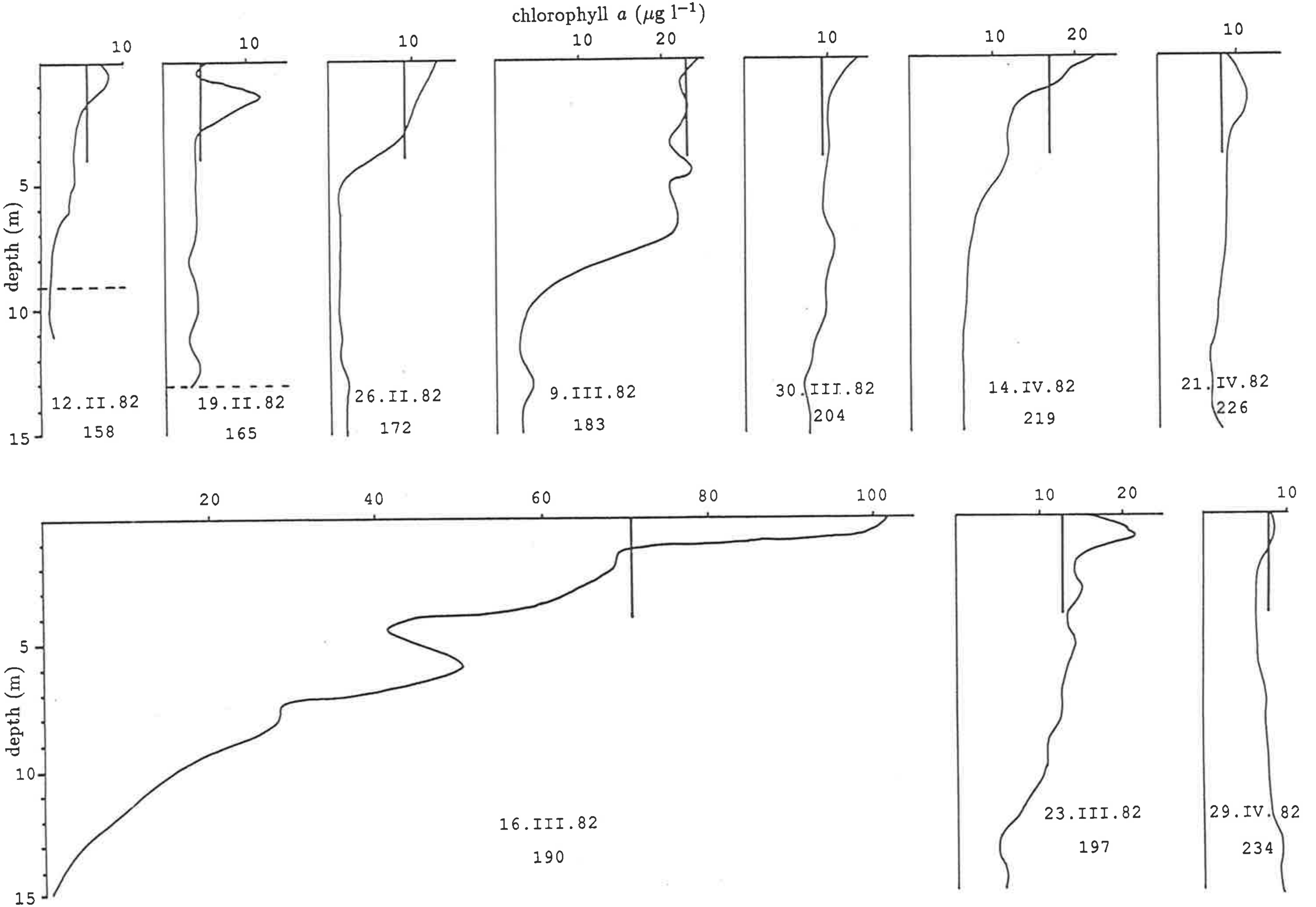


Figure 3.24 Vertical distribution of chlorophyll *a* ($\mu g\ l^{-1}$) in Mt Bold Reservoir during the 1981/1982 growth season. The integrated 0-4 m tube sample is indicated by a vertical line and the estimated mixed depth by a horizontal broken line.



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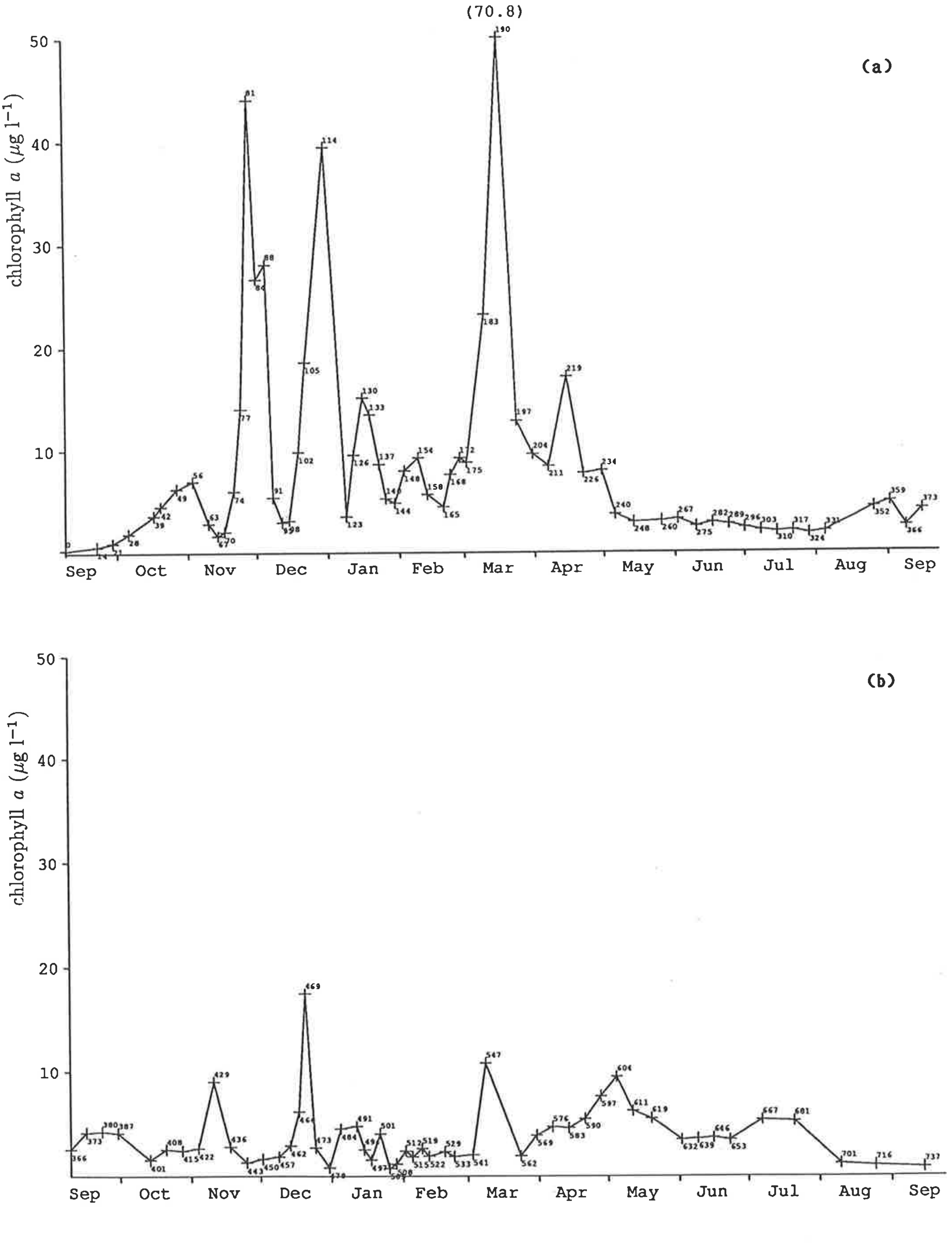


Figure 3.25 Chlorophyll a concentration ($\mu g\ l^{-1}$) of an integrated 0-4 m tube sample from Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

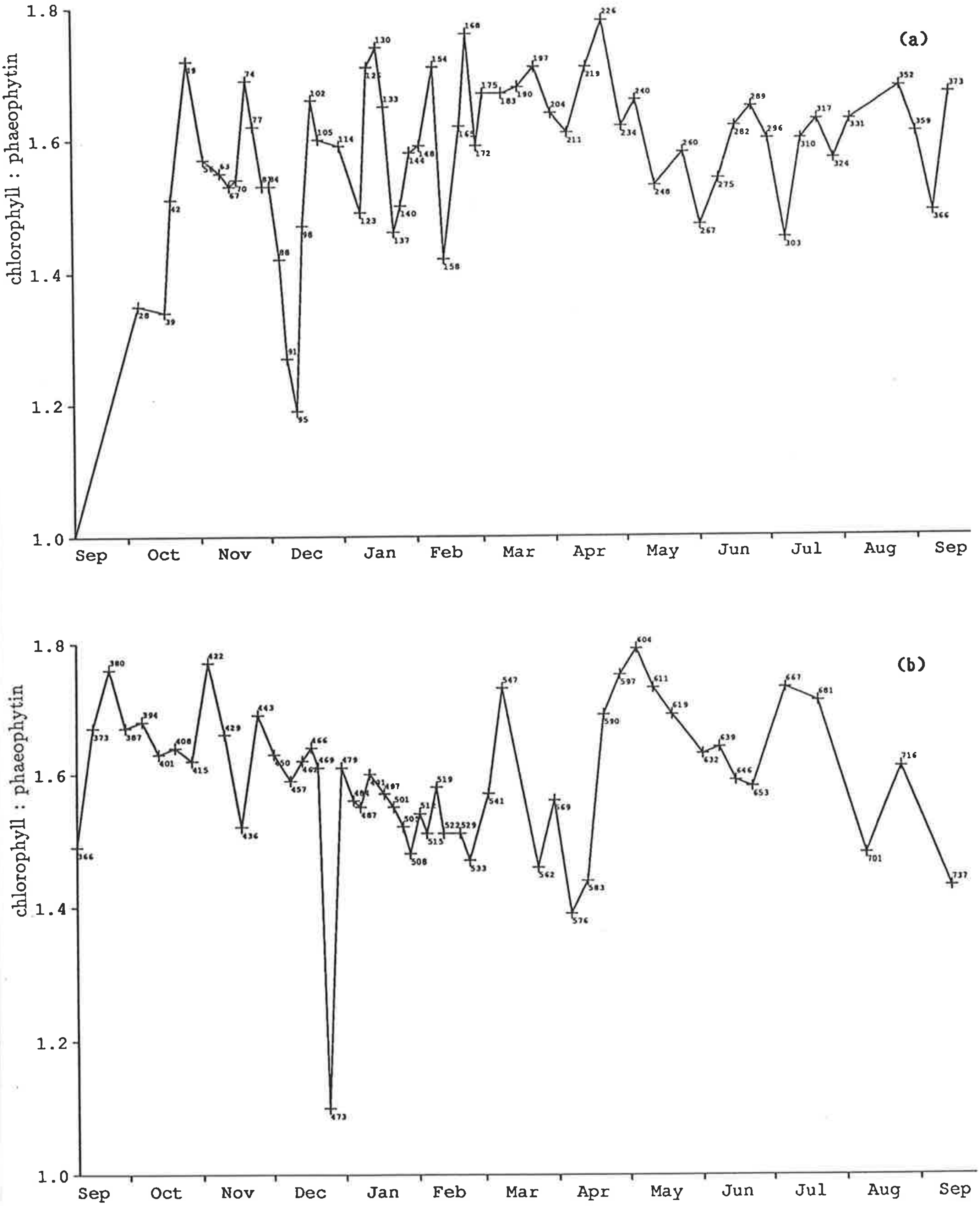


Figure 3.26 Chlorophyll : phaeophytin ratio of the integrated sample from Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

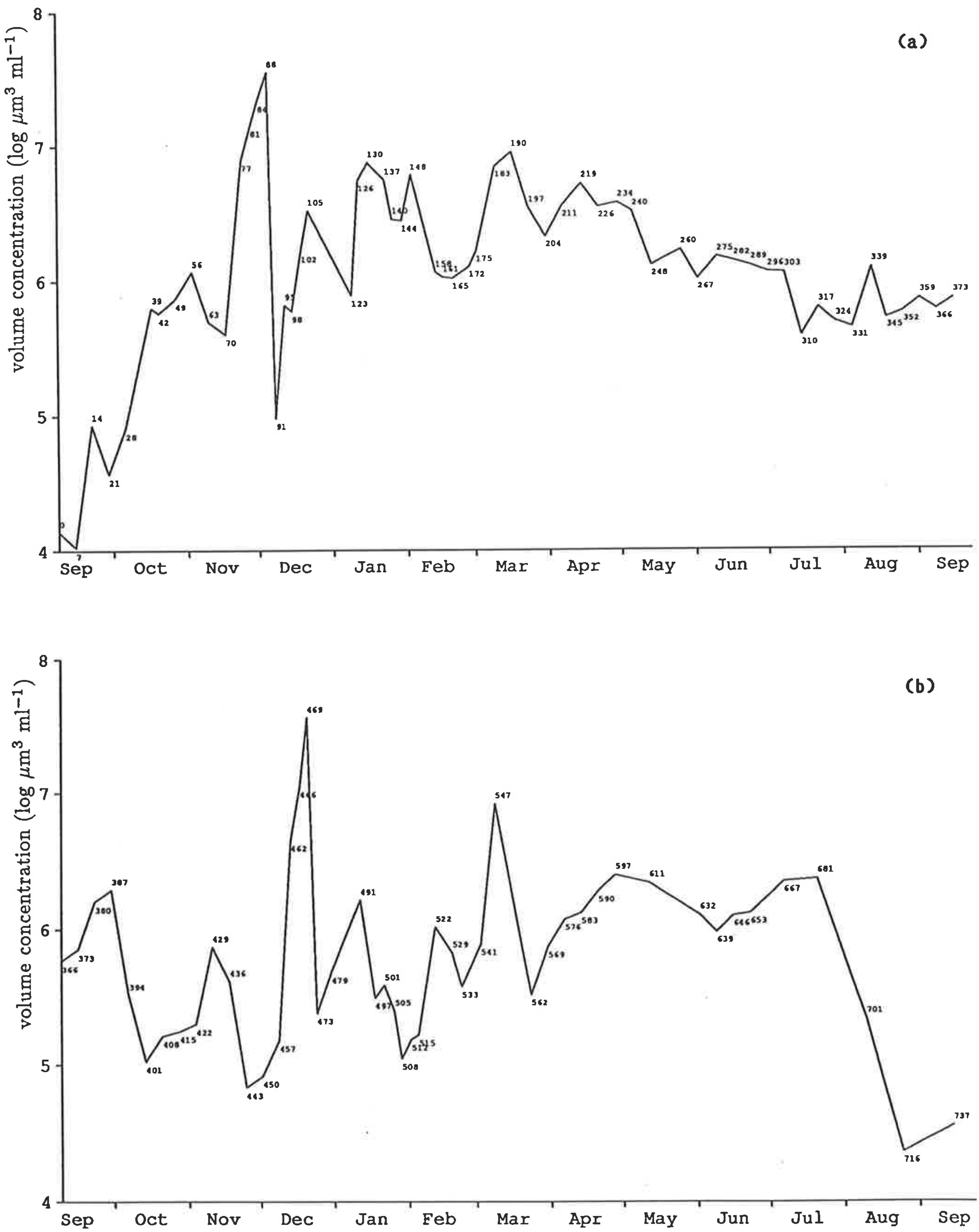


Figure 3.27 Phytoplankton total volume concentration (log μm^3 ml^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

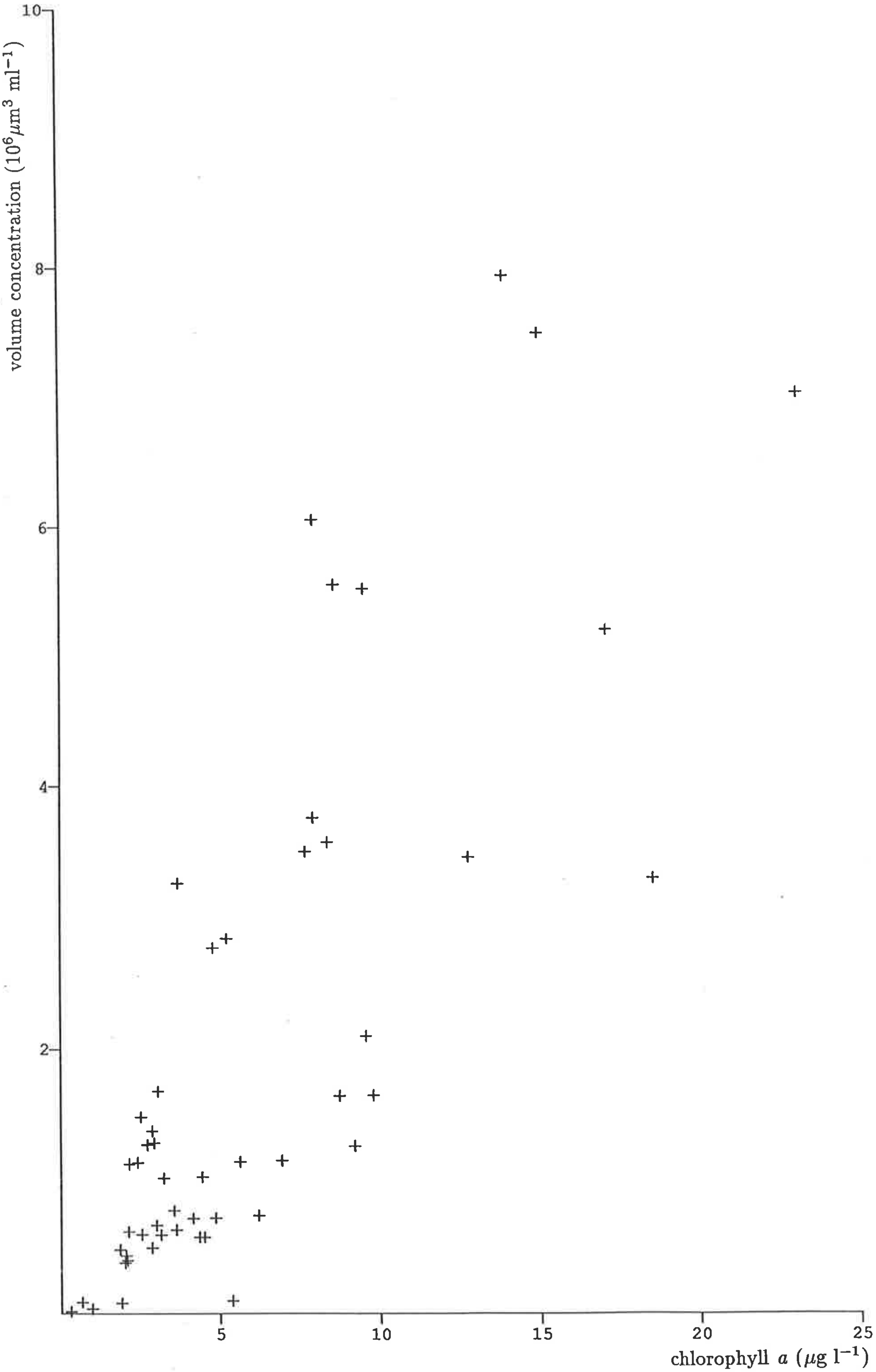


Figure 3.28a **Relationship between phytoplankton total volume concentration and chlorophyll *a* concentration for the integrated samples from Mt Bold Reservoir during 1981/1982.**

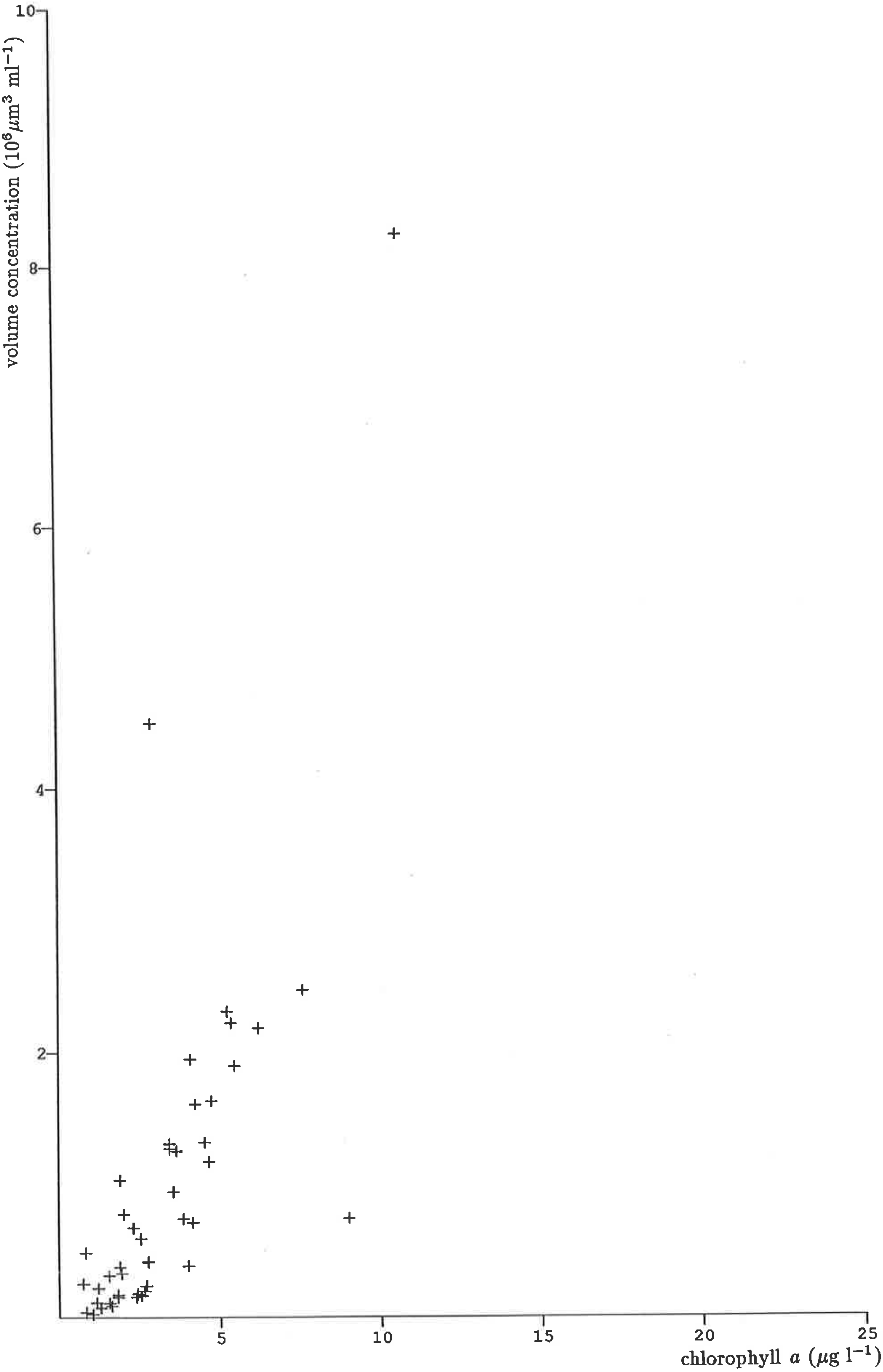


Figure 3.28b **Relationship between phytoplankton total volume concentration and chlorophyll *a* concentration for the integrated samples from Mt Bold Reservoir during 1982/1983.**

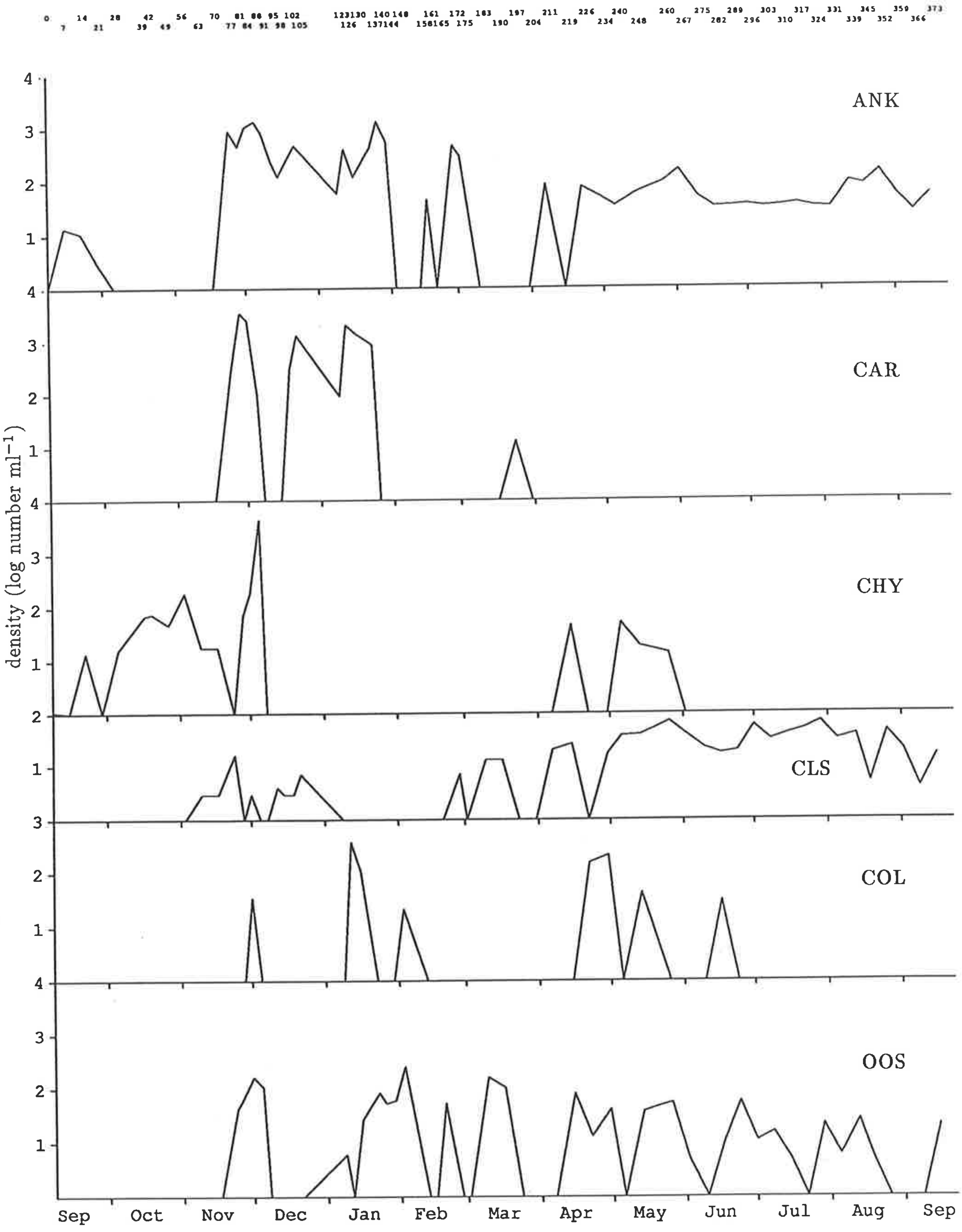


Figure 3.29.1a Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) ANK, CAR, CHY, CLS, COL and OOS during 1981/1982. See Table 3.4 for taxa codes.

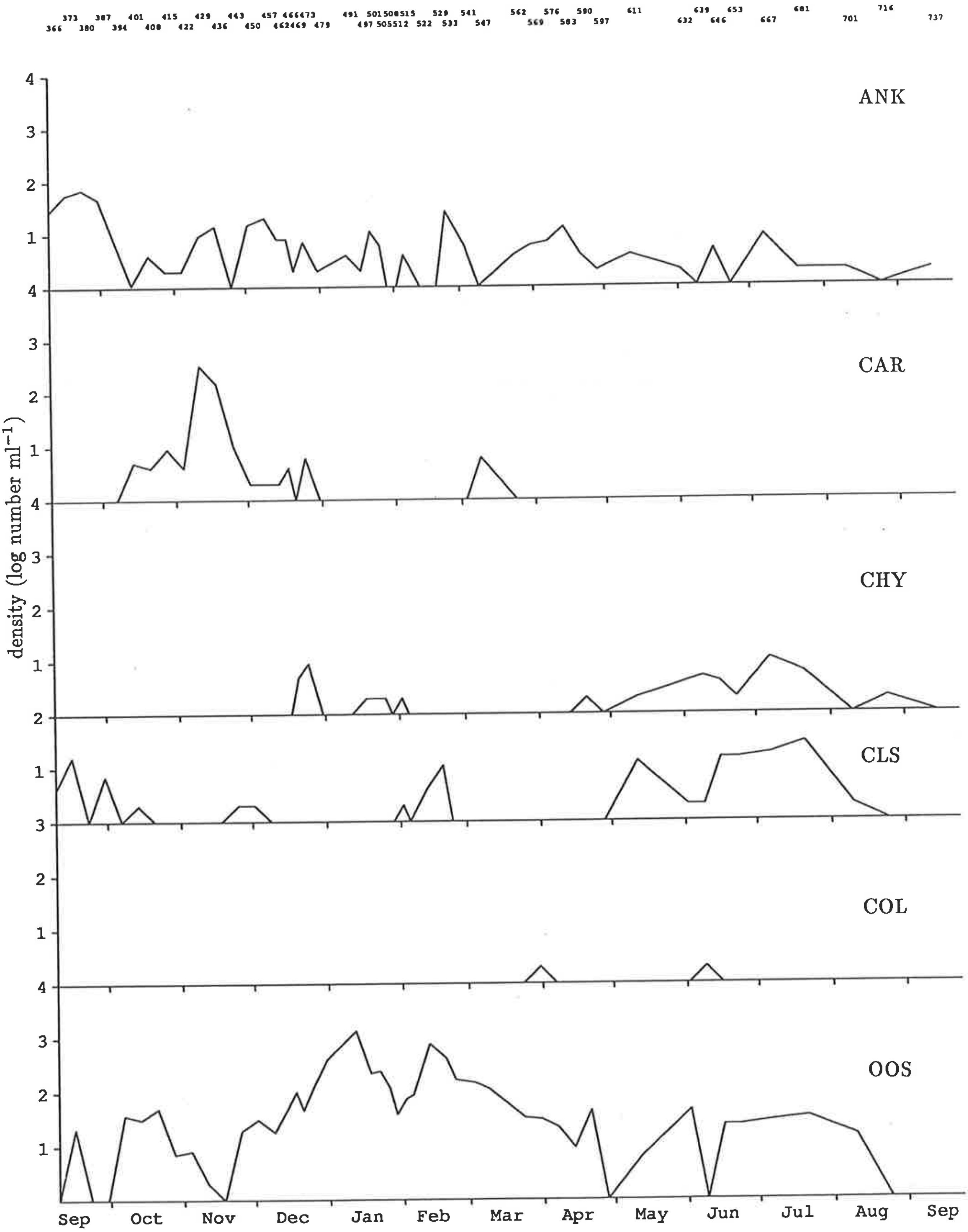


Figure 3.29.1b Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) ANK, CAR, CHY, CLS, COL and OOS during 1982/1983. See Table 3.4 for taxa codes.

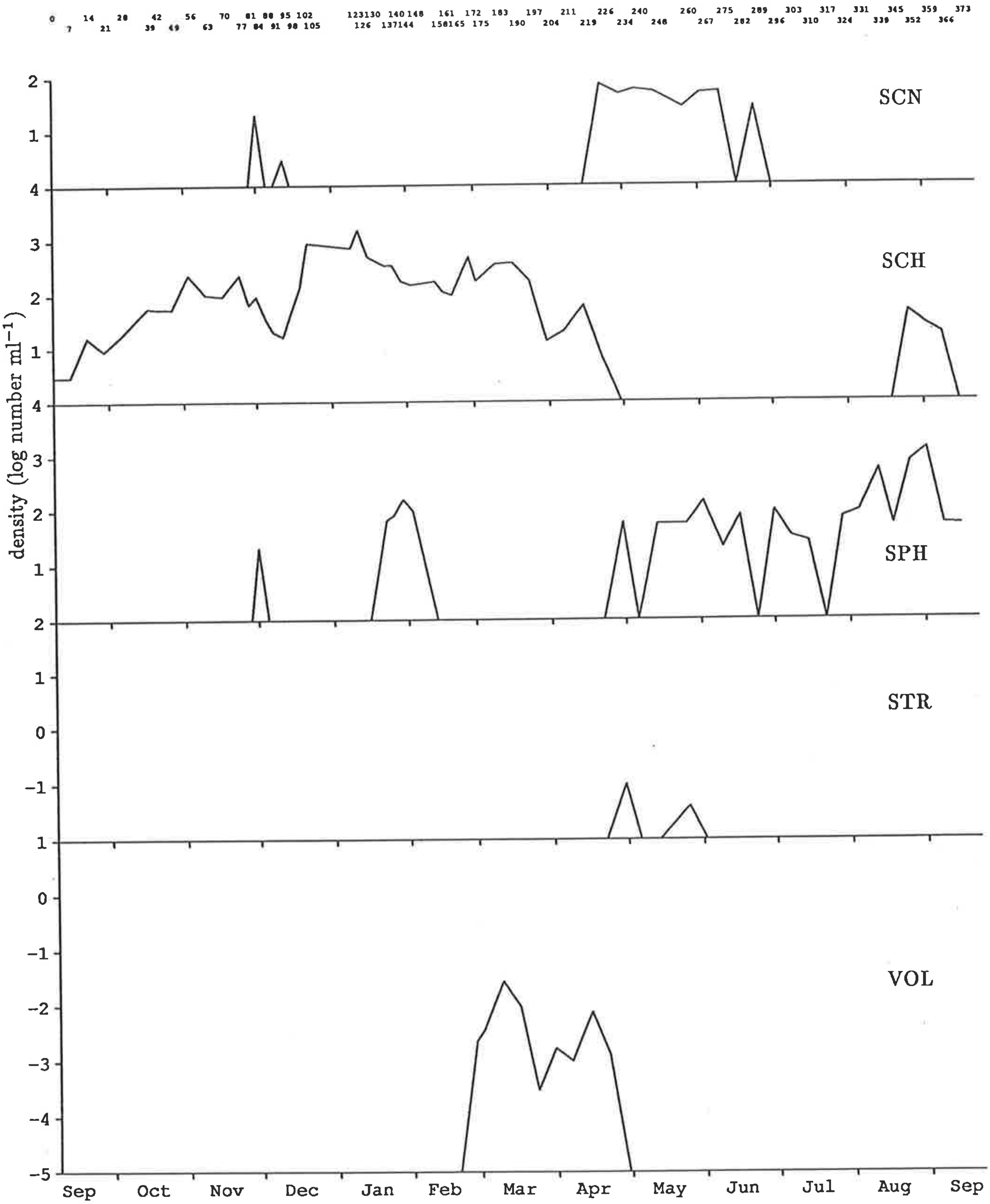


Figure 3.29.2a Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) SCN, SCH, SPH, STR and VOL during 1981/1982. See Table 3.4 for taxa codes.

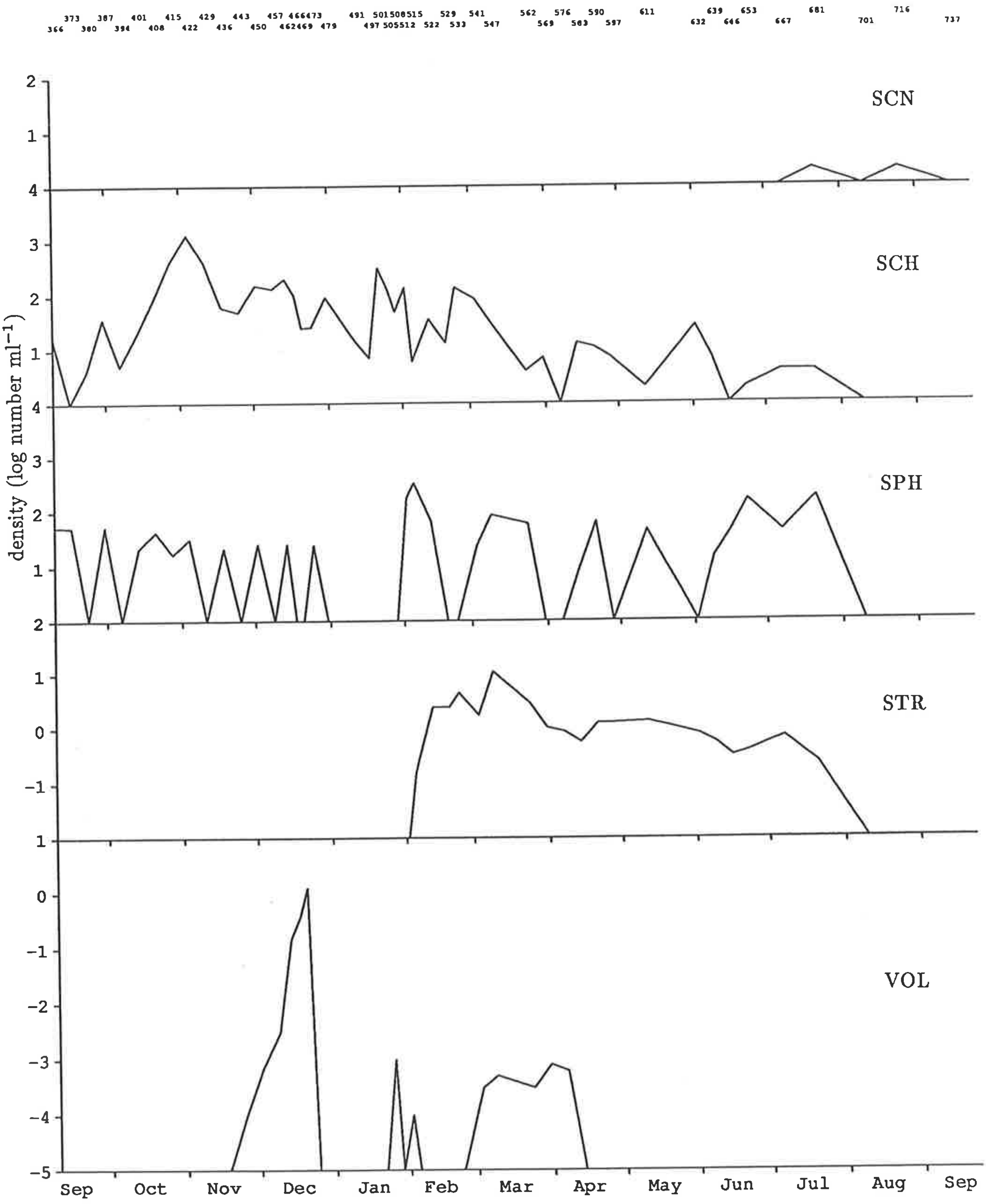


Figure 3.29.2b Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) SCN, SCH, SPH, STR and VOL during 1982/1983. See Table 3.4 for taxa codes.

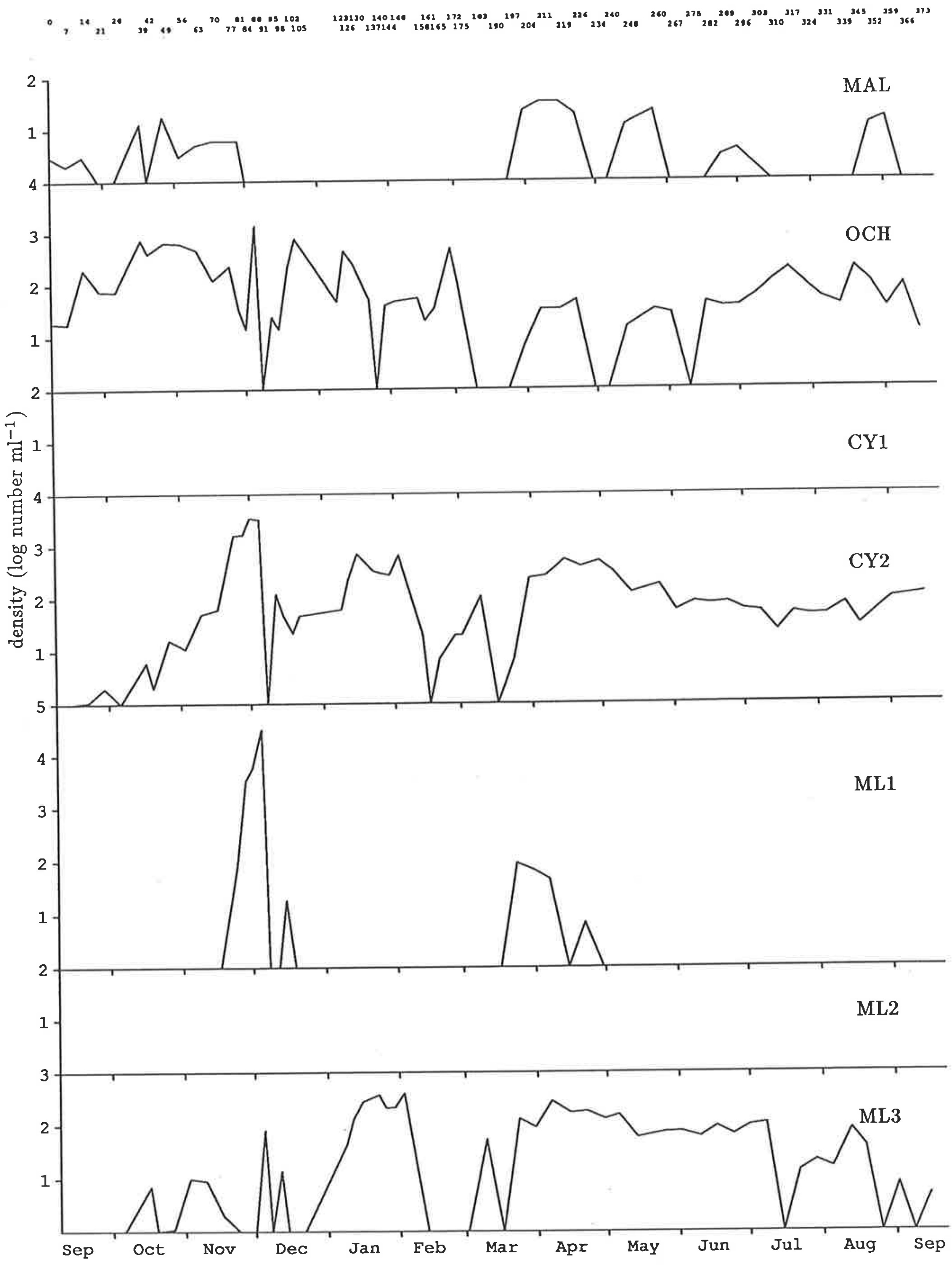


Figure 3.29.3a Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) MAL, OCH, CY1, CY2, ML1, ML2 and ML3 during 1981/1982. See Table 3.4 for taxa codes.

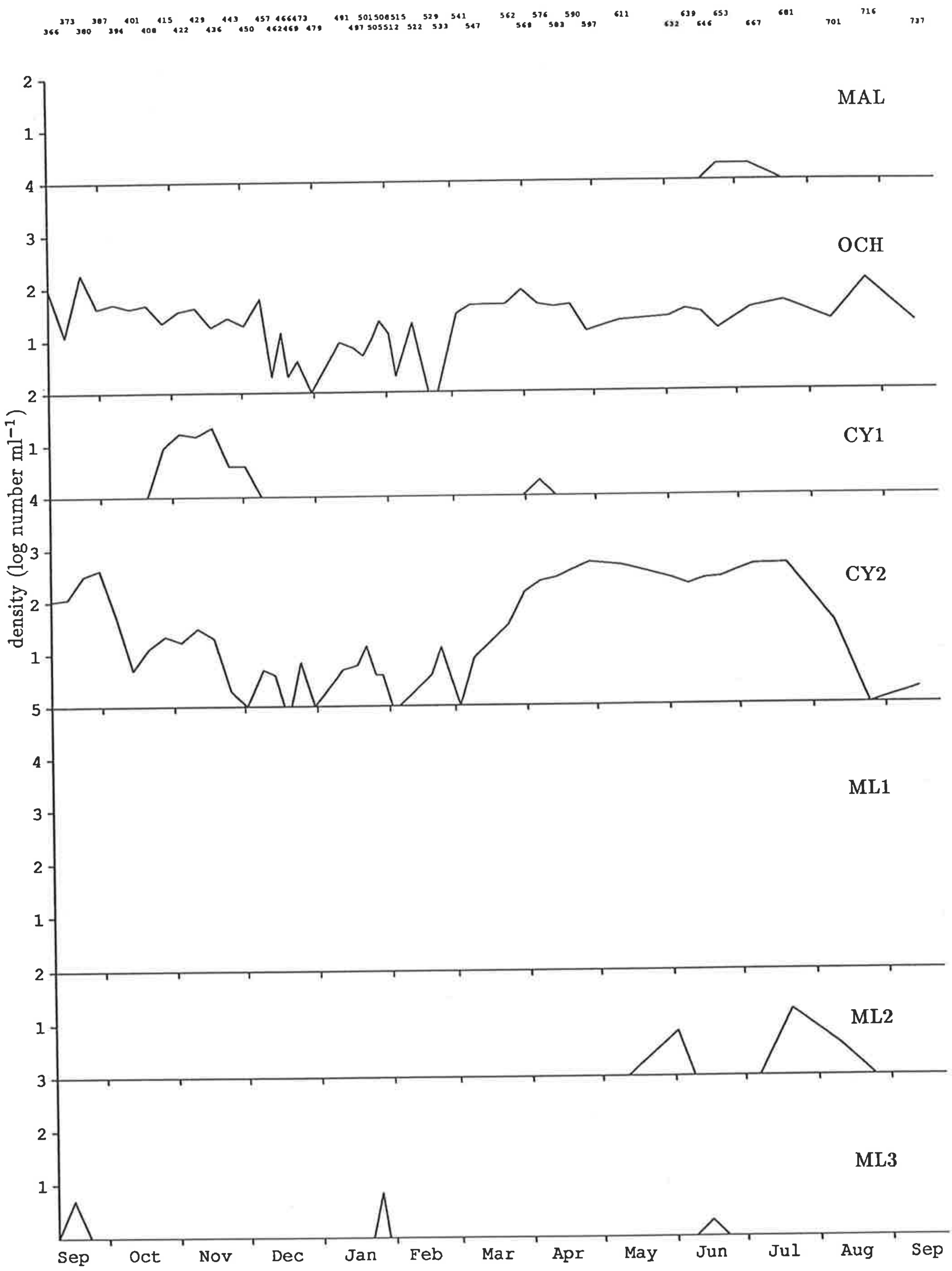


Figure 3.29.3b Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) MAL, OCH, CY1, CY2, ML1, ML2 and ML3 during 1982/1983. See Table 3.4 for taxa codes.

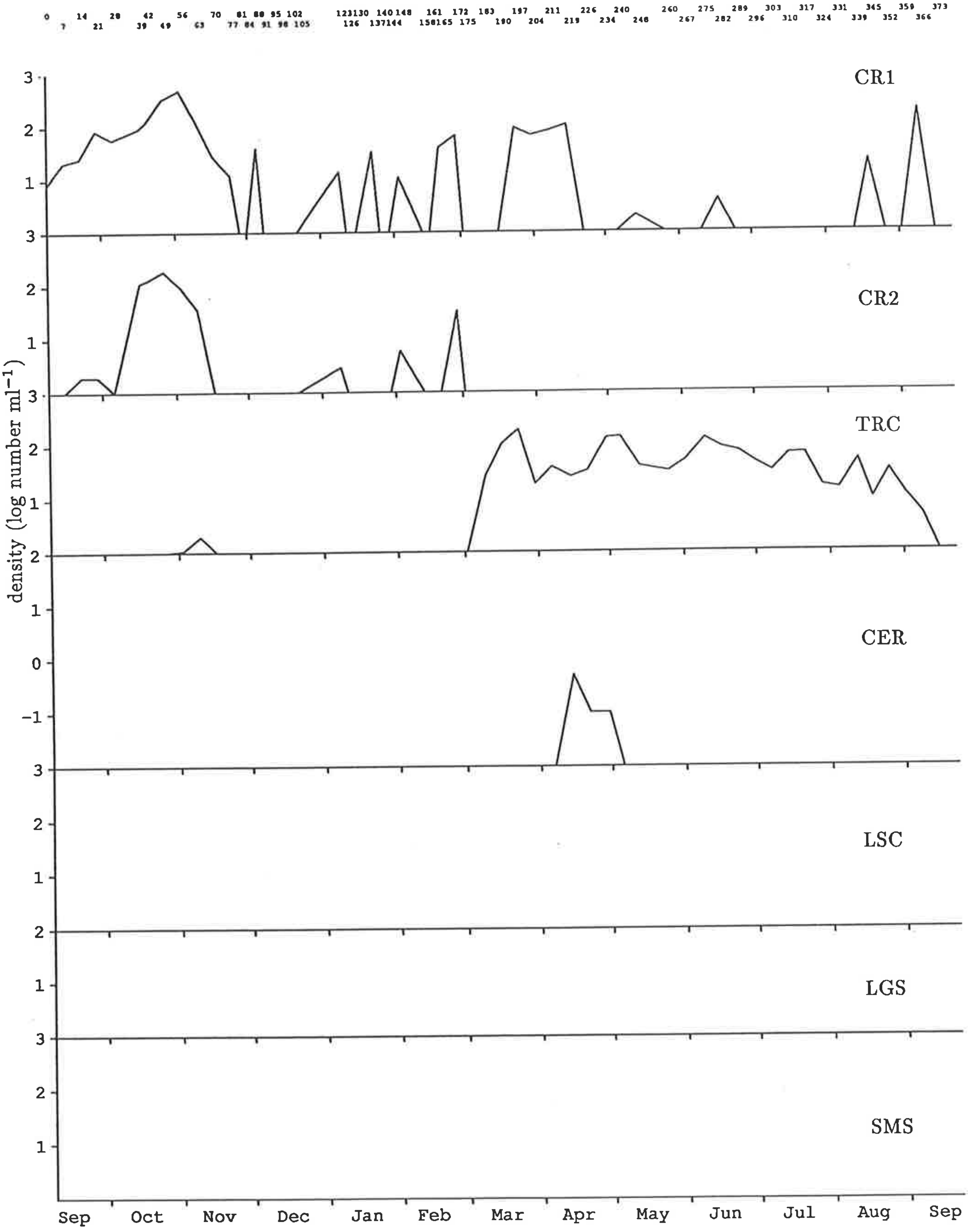


Figure 3.29.4a Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) CR1, CR2, TRC, CER, LSC, LGS and SMS during 1981/1982. See Table 3.4 for taxa codes.

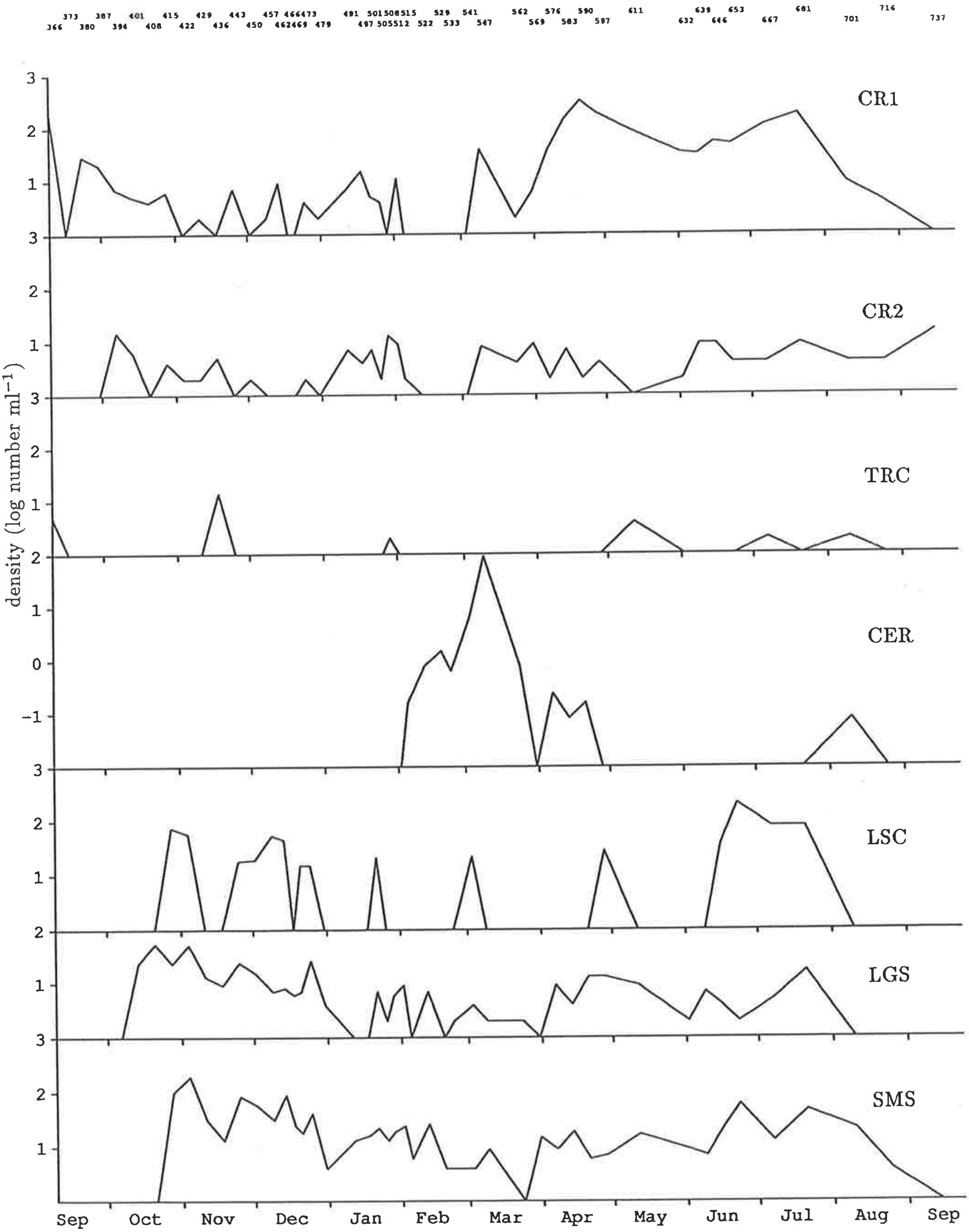


Figure 3.29.4b Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) CR1, CR2, TRC, CER, LSC, LGS and SMS during 1982/1983. See Table 3.4 for taxa codes.

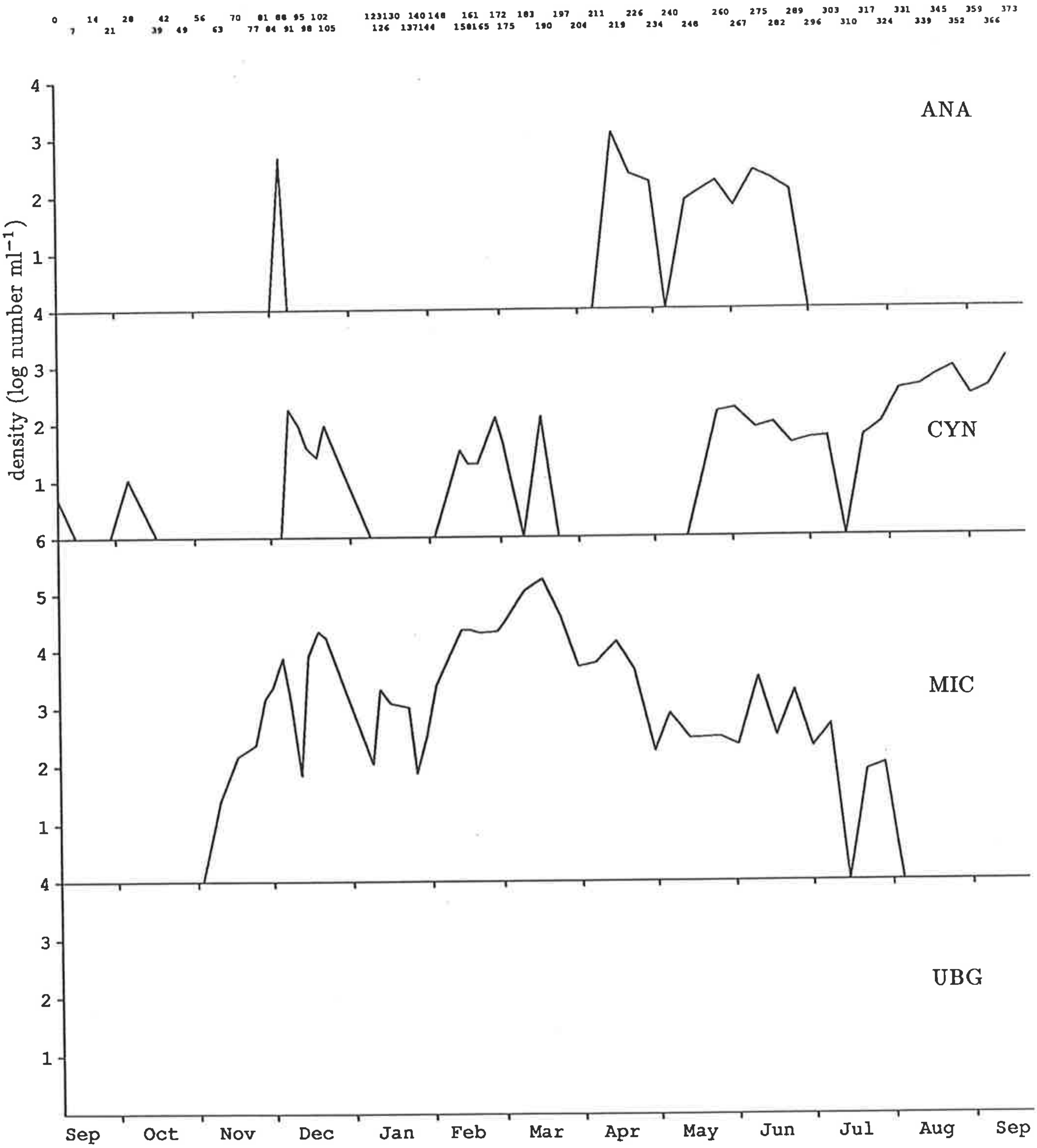


Figure 3.29.5a Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) ANA, CYN, MIC and UBG during 1981/1982. See Table 3.4 for taxa codes.

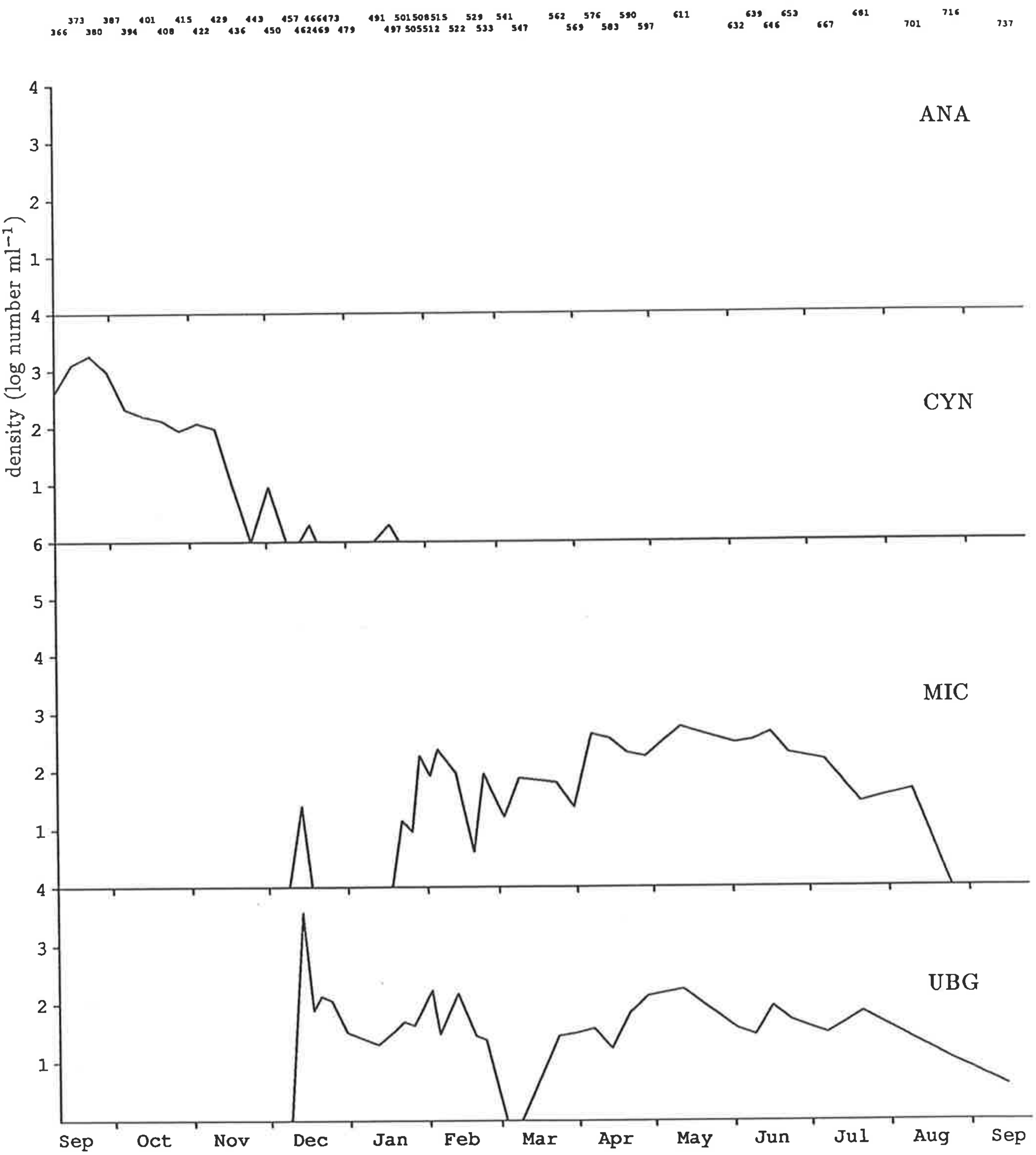


Figure 3.29.5b Densities (log number ml^{-1}) of phytoplankton taxa; (top to bottom) ANA, CYN, MIC and UBG during 1982/1983. See Table 3.4 for taxa codes.

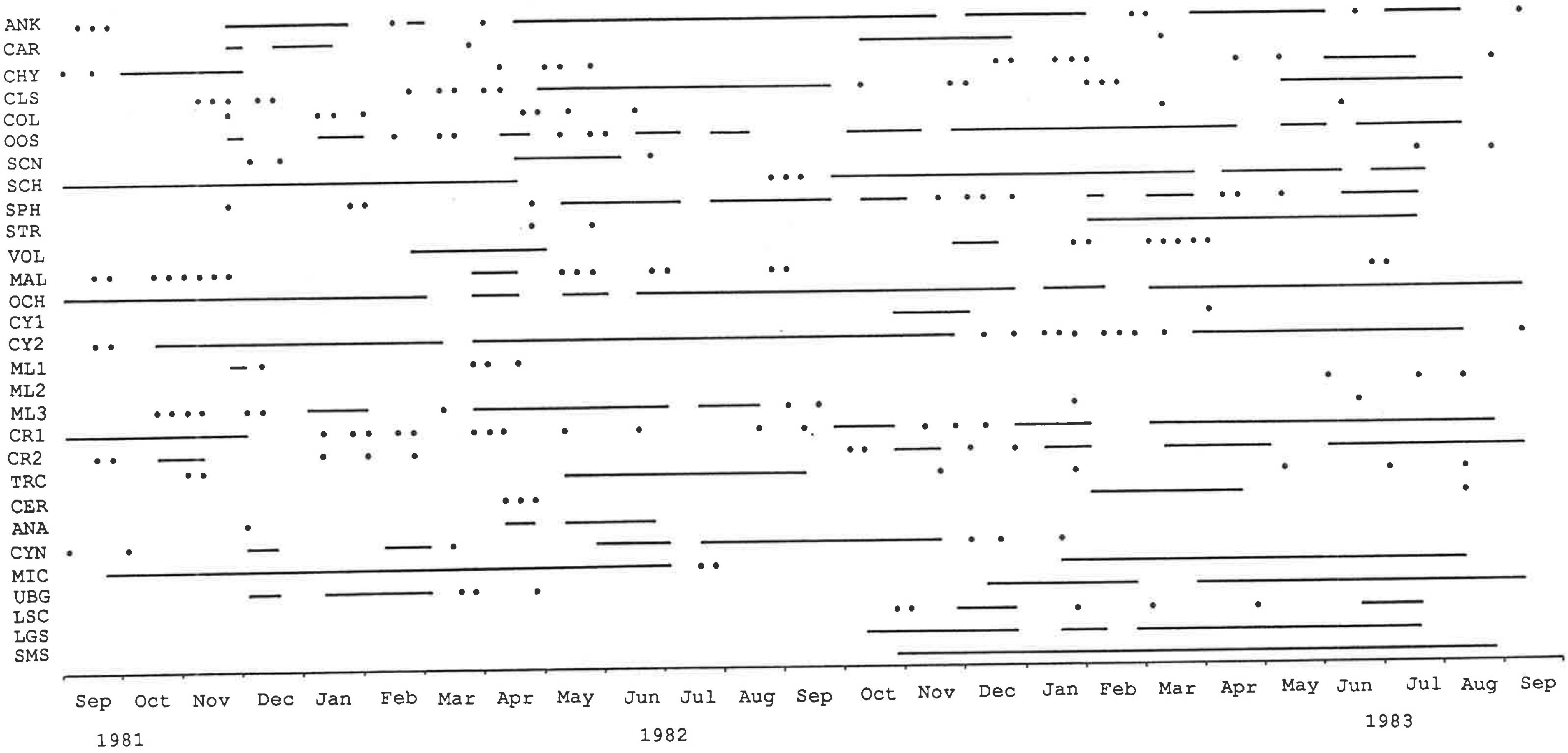


Figure 3.30 Weekly occurence of phytoplankton taxa in Mt Bold Reservoir during the study period. Solid line represents continuous presence; dot represents sporadic occurence. Taxa codes as in Table 3.4.

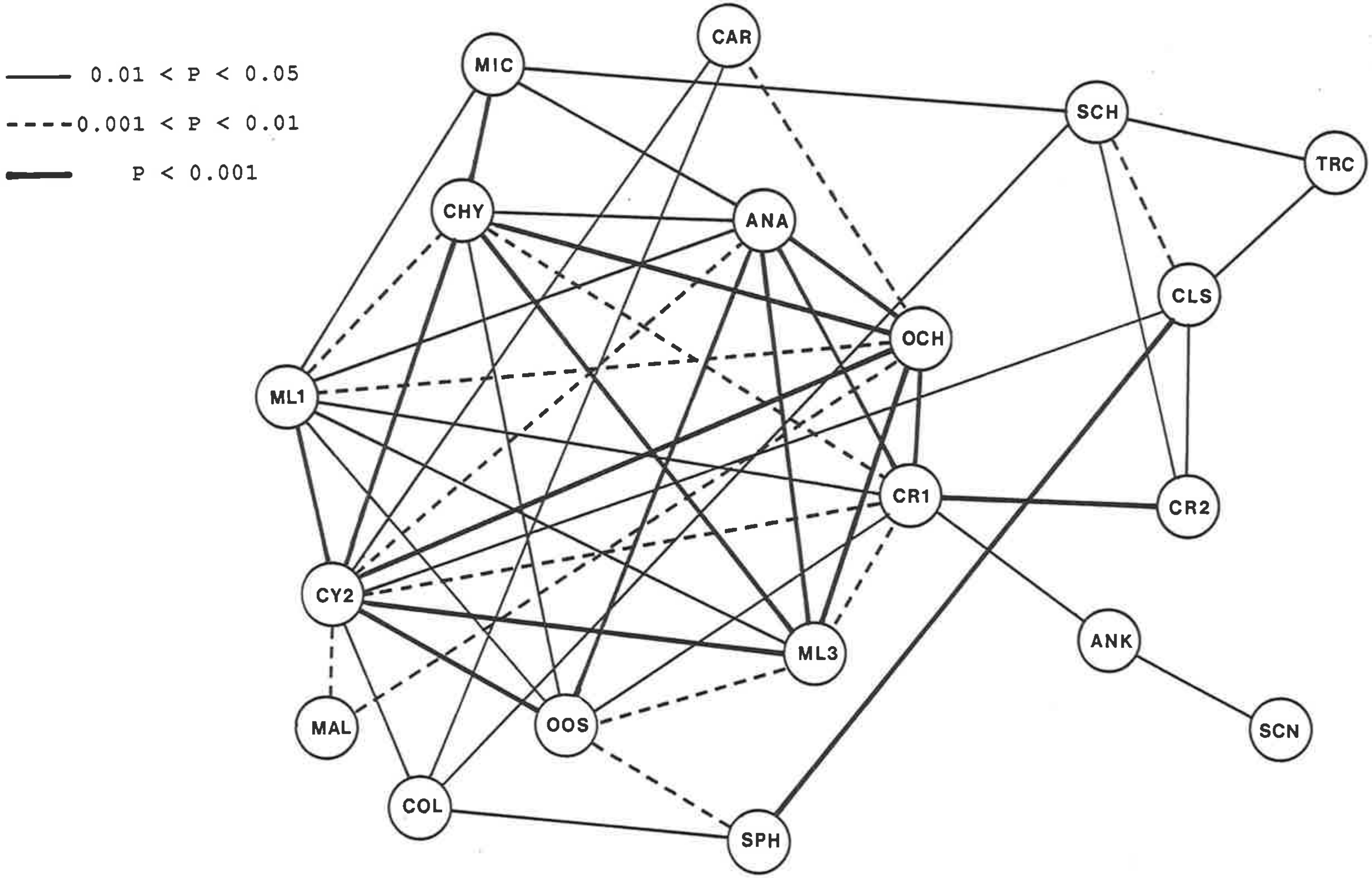


Figure 3.31.1a Positive correlations between net growth rates in Mt Bold Reservoir during 1981/1982. See Table 3.4 for taxa codes.

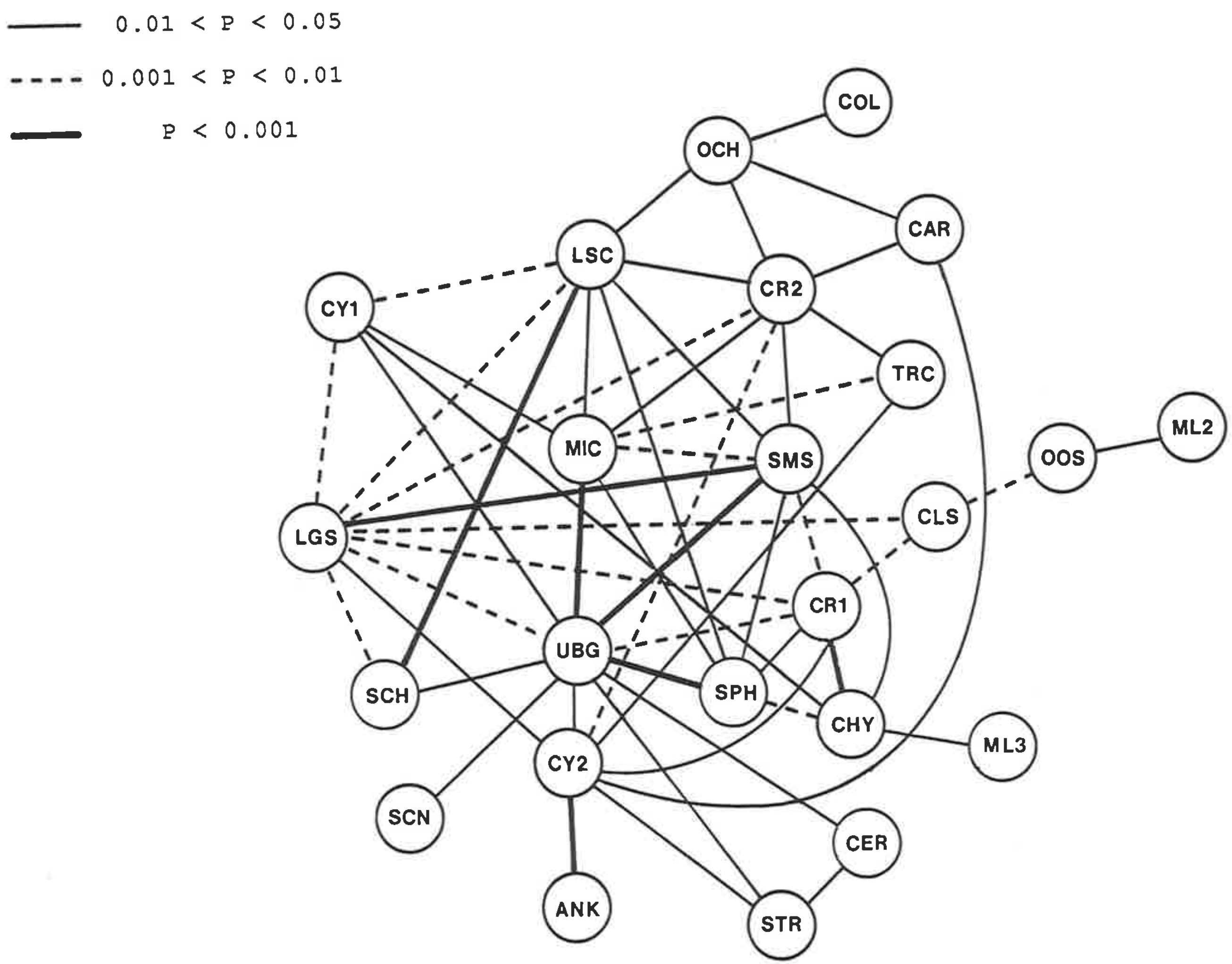


Figure 3.31.1b Positive correlations between net growth rates of phytoplankton in Mt Bold Reservoir during 1982/1983. See Table 3.4 for taxa codes.

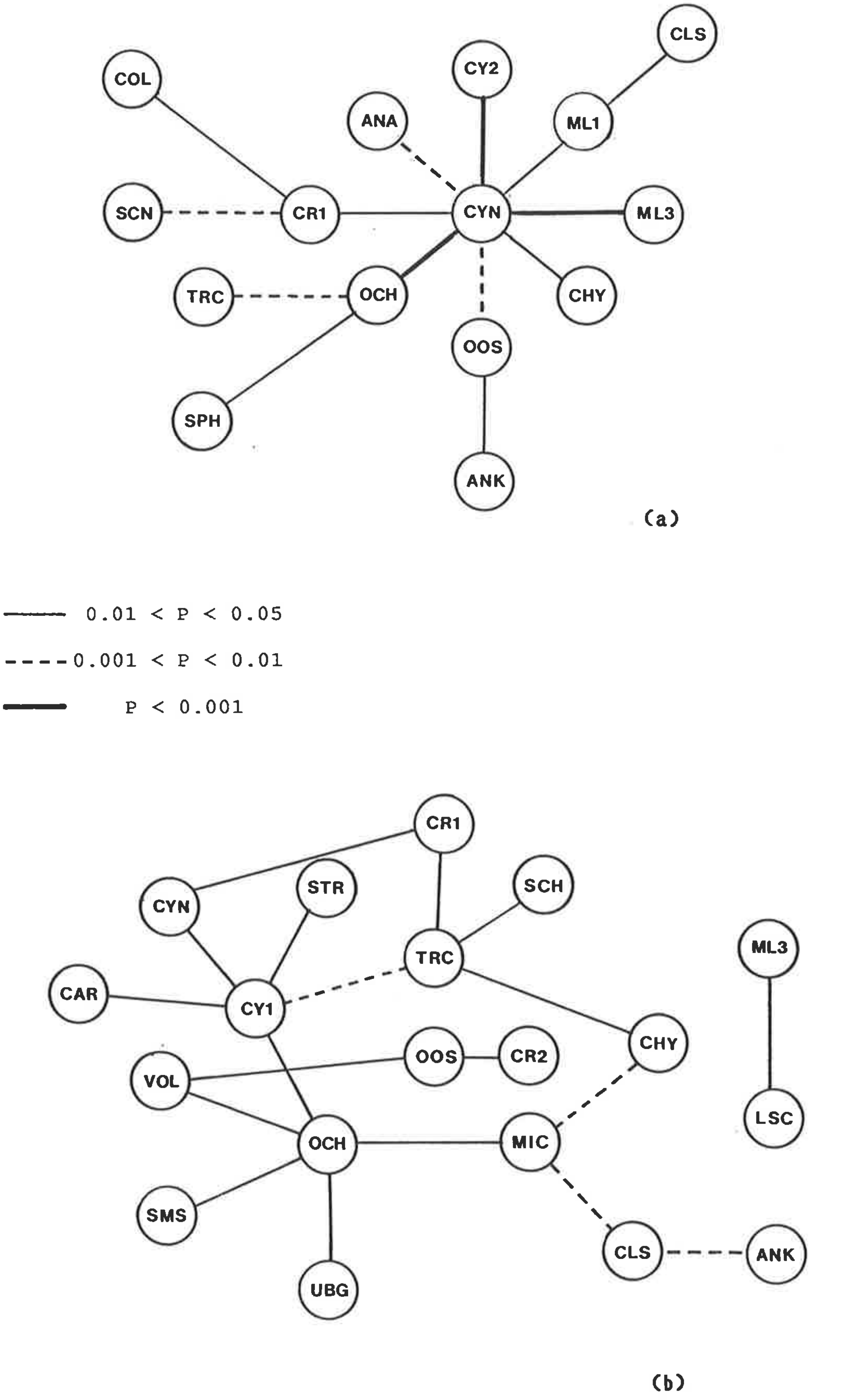


Figure 3.31.2 Negative correlations between net growth rates of phytoplankton in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. See Table 3.4 for taxa codes.

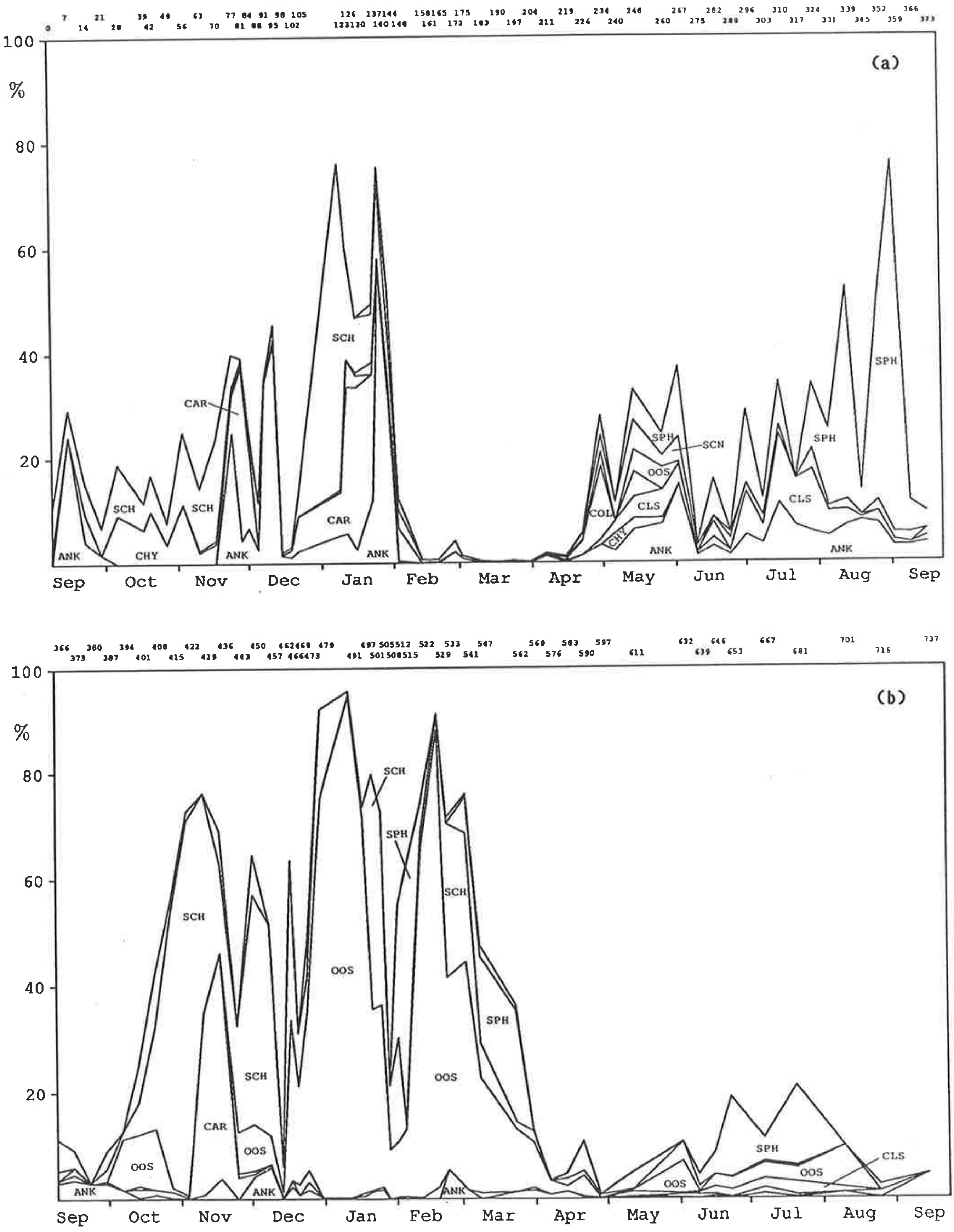


Figure 3.32.1 Percent composition based on density of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) ANK, CAR, CHY, CLS, COL, OOS, SCN, SCH, SPH, STR and VOL are shown. See Table 3.4 for taxa codes.

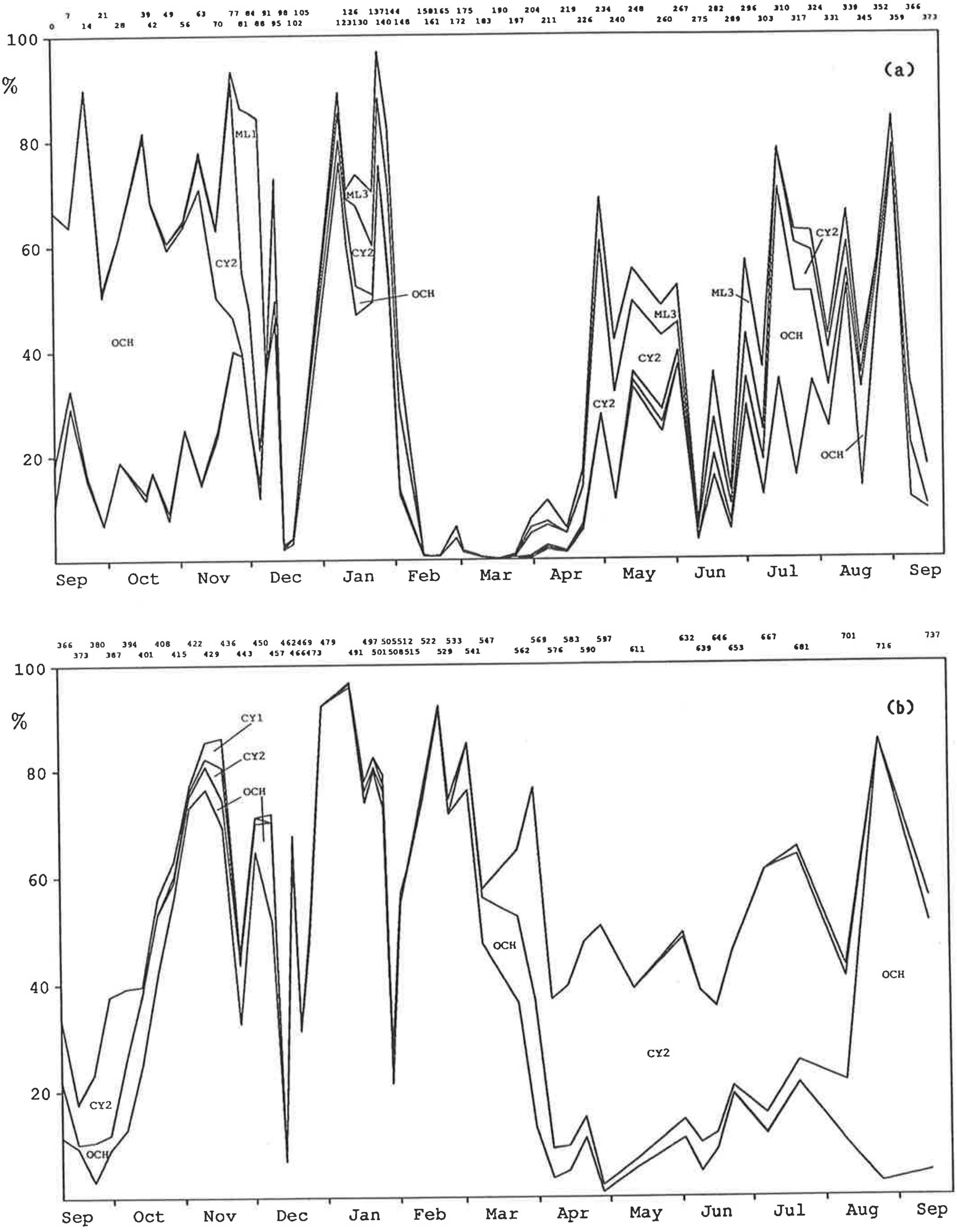


Figure 3.32.2 Percent composition based on density of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) MAL, OCH, CY1, CY2, ML1, ML2 and ML3 are shown. See Table 3.4 for taxa codes.

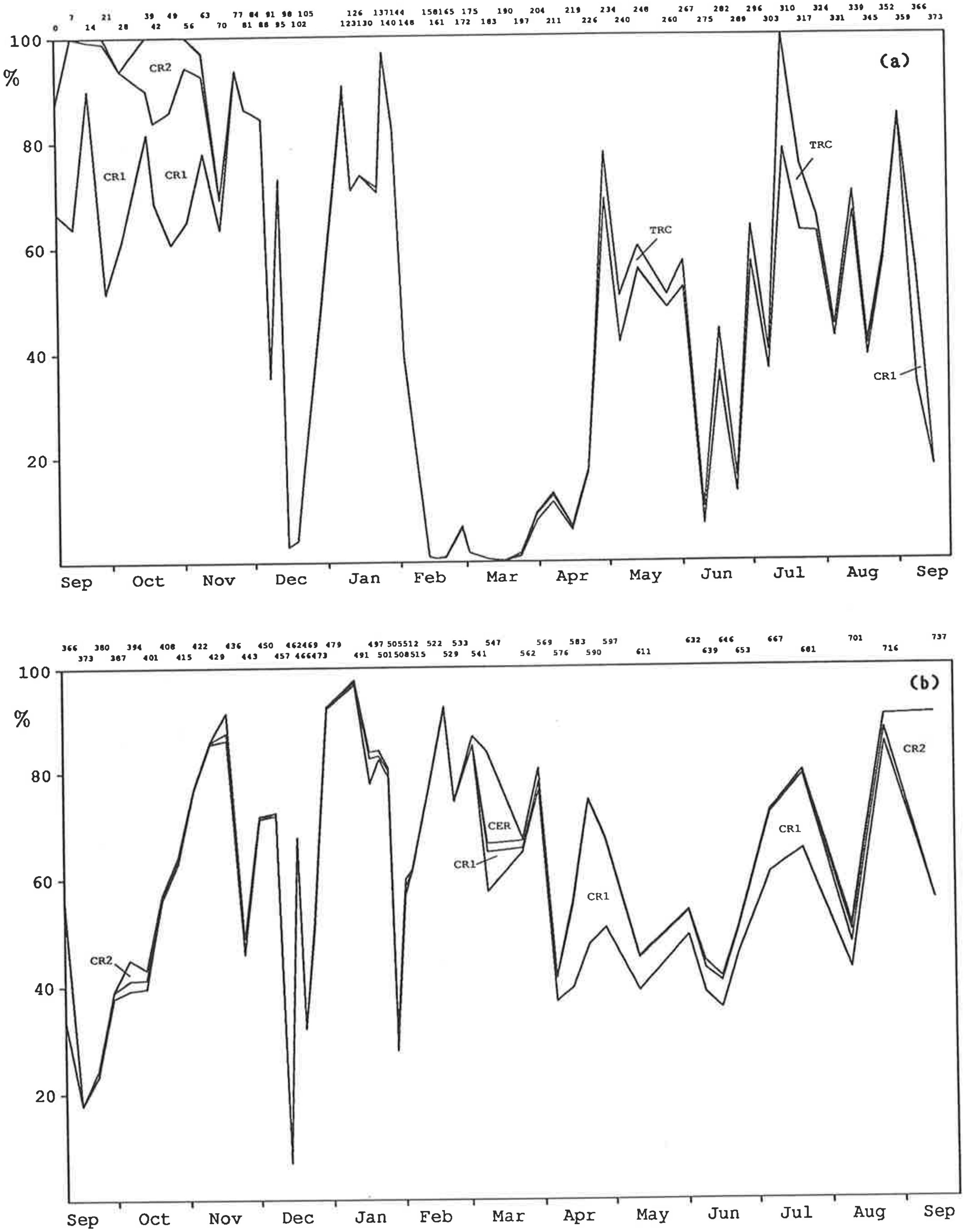


Figure 3.32.3 Percent composition based on density of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) CR1, CR2, TRC and CER are shown. See Table 3.4 for taxa codes.

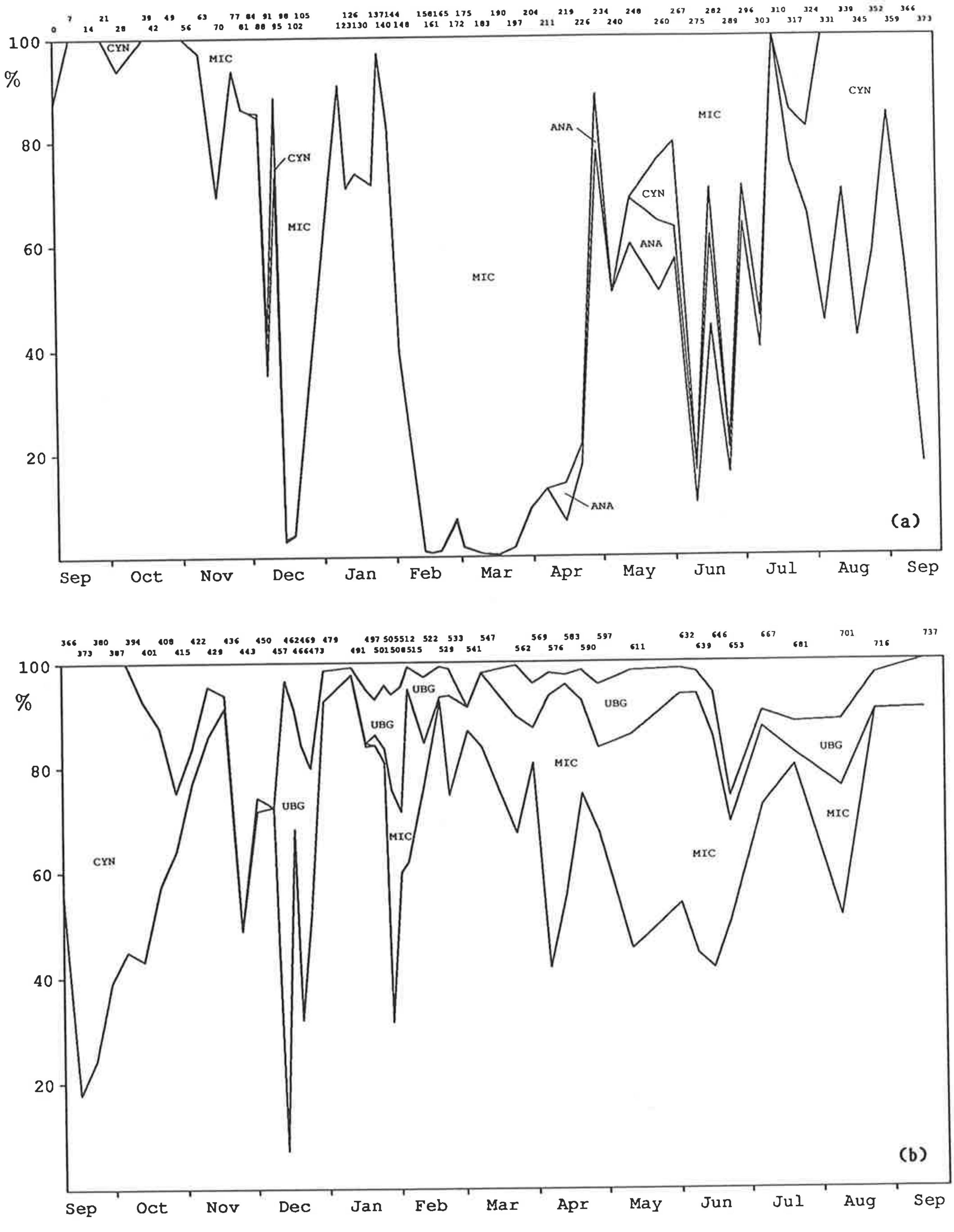


Figure 3.32.4 Percent composition based on density of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) ANA, CYN, MIC and UBG are shown. See Table 3.4 for taxa codes.

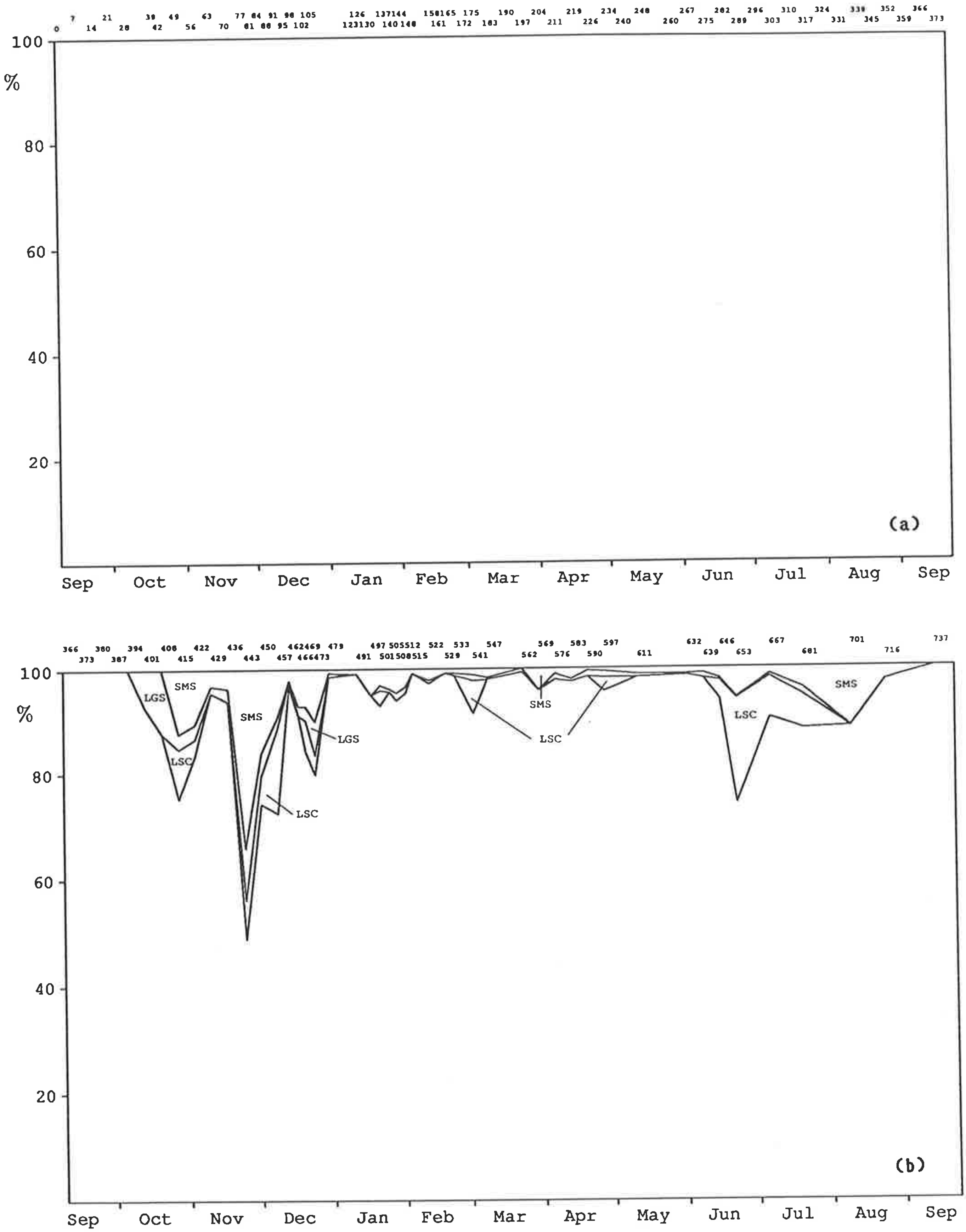


Figure 3.32.5 Percent composition based on density of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) LSC, LGS and SMS are shown. See Table 3.4 for taxa codes.

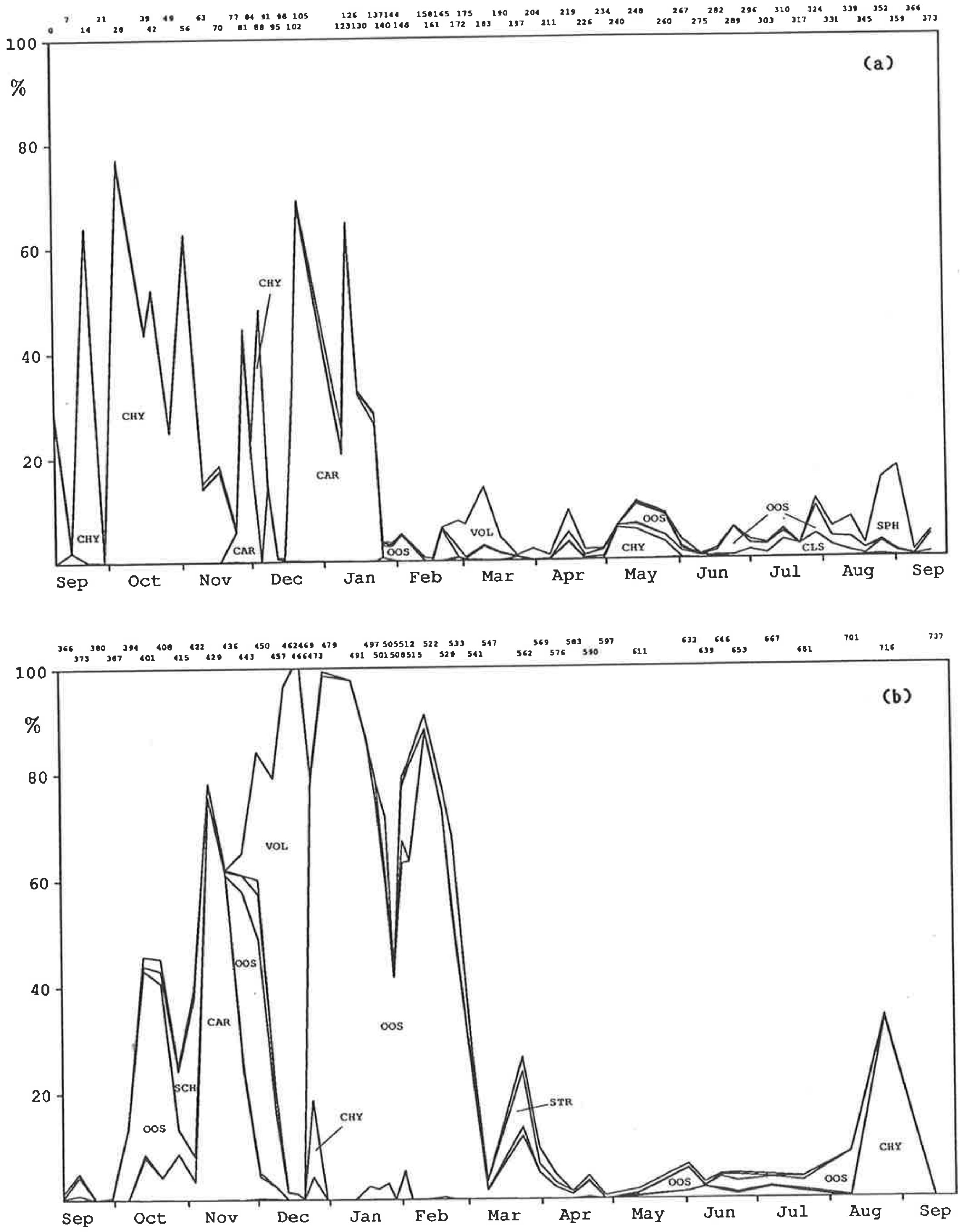


Figure 3.33.1 Percent composition based on biomass of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) ANK, CAR, CHY, CLS, COL, OOS, SCN, SCH, SPH, STR and VOL are shown. See Table 3.4 for taxa codes.

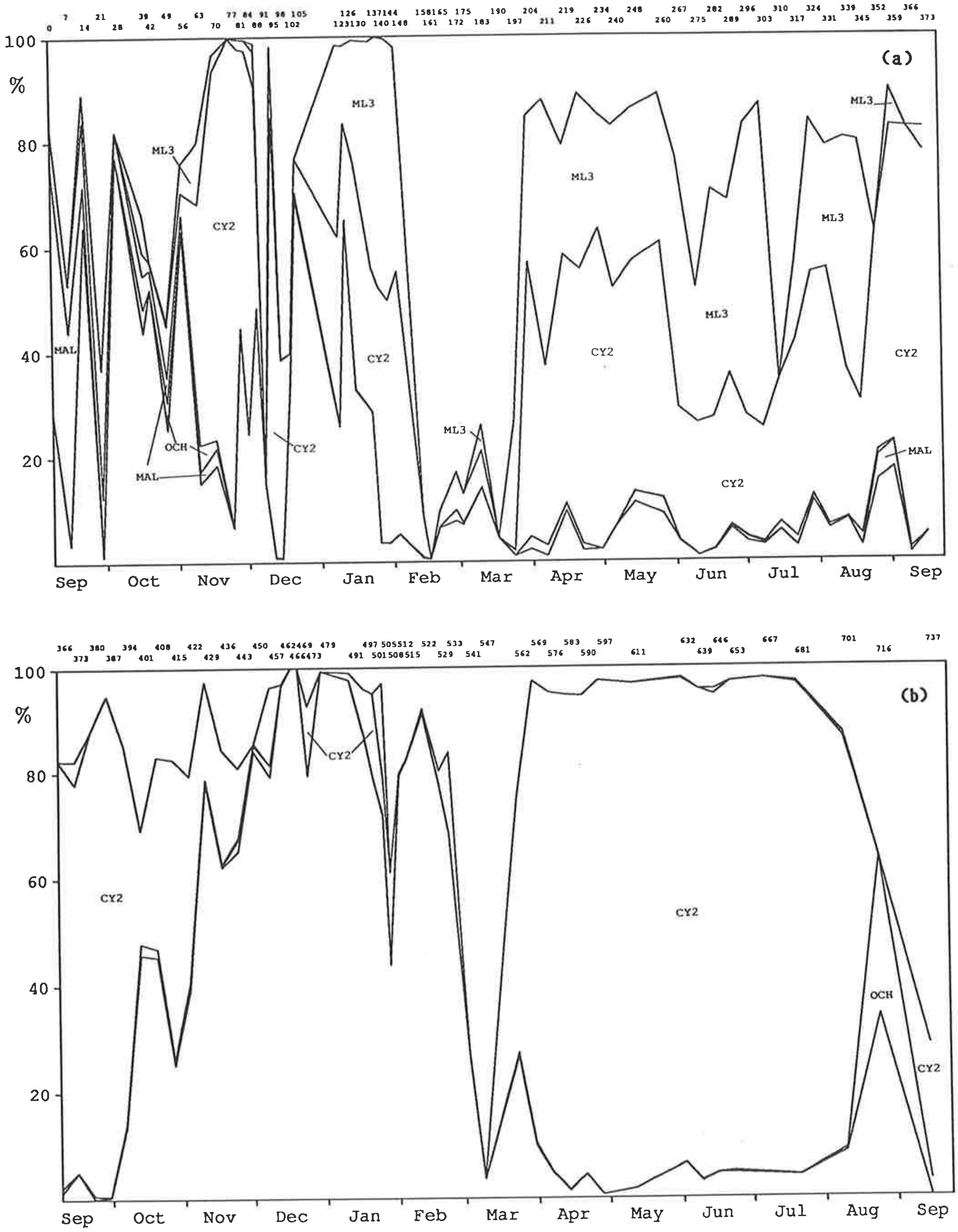


Figure 3.33.2 Percent composition based on biomass of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) MAL, OCH, CY1, CY2, ML1, ML2 and ML3 are shown. See Table 3.4 for taxa codes.

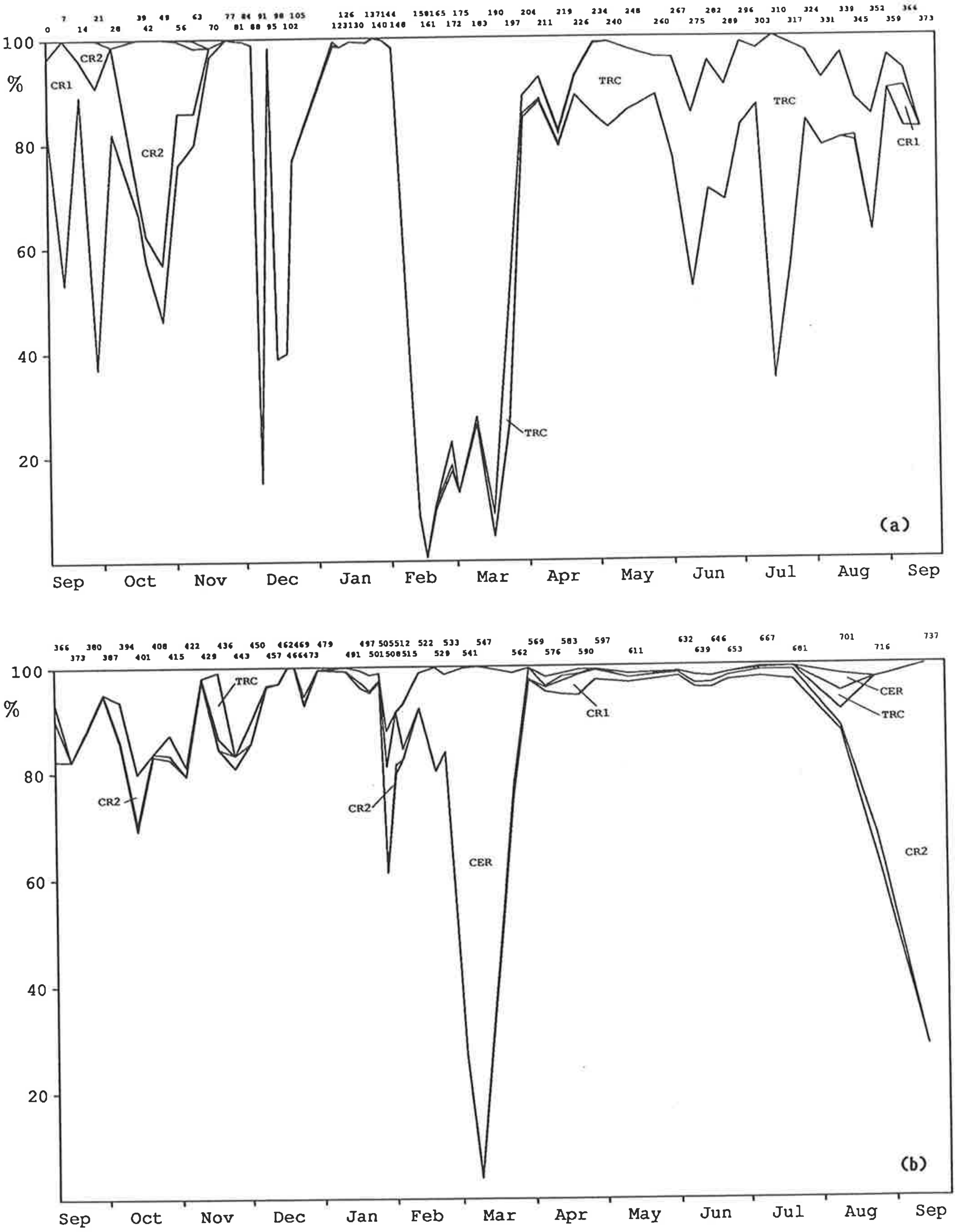


Figure 3.33.3 Percent composition based on biomass of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) CR1, CR2, TRC and CER are shown. See Table 3.4 for taxa codes.

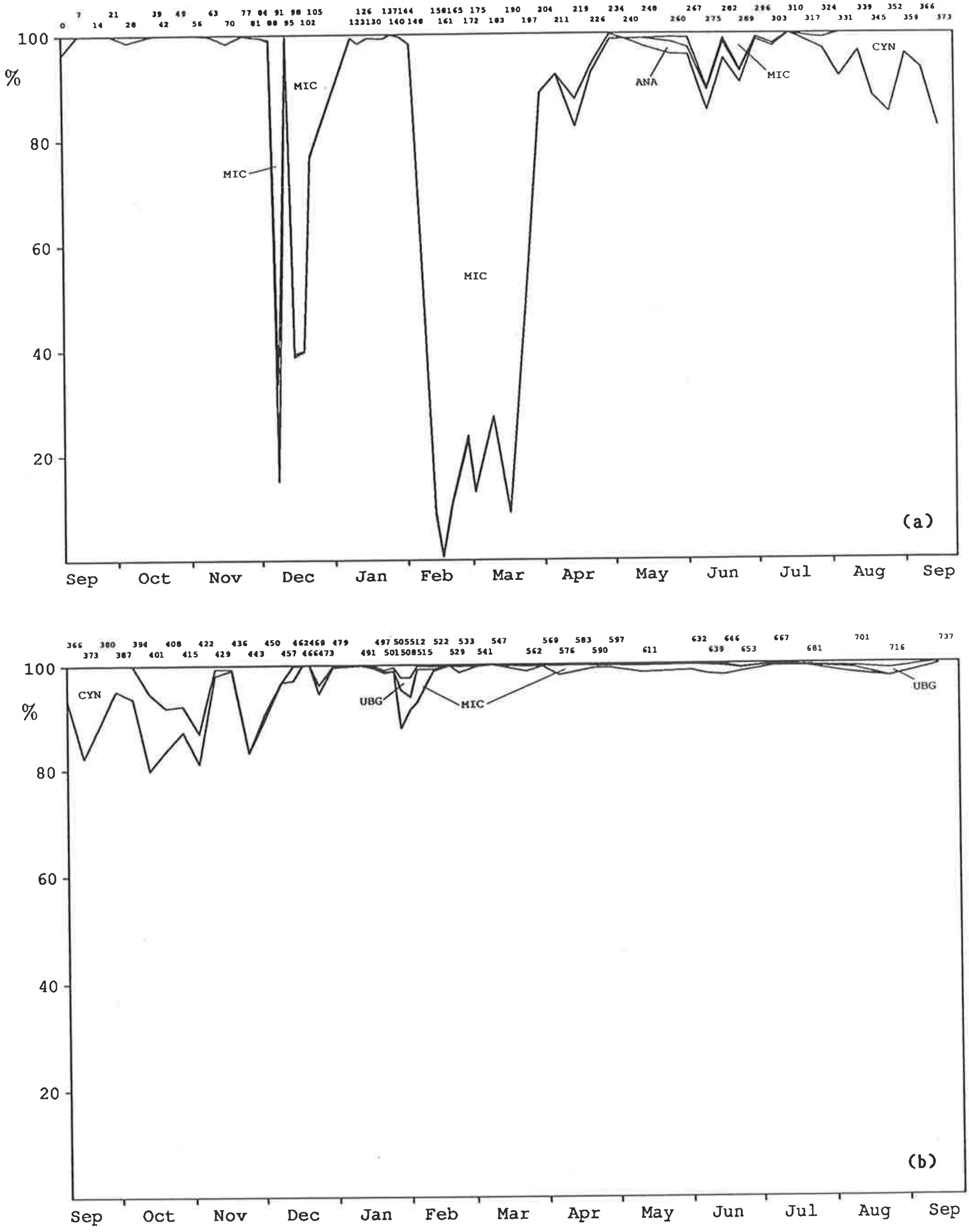
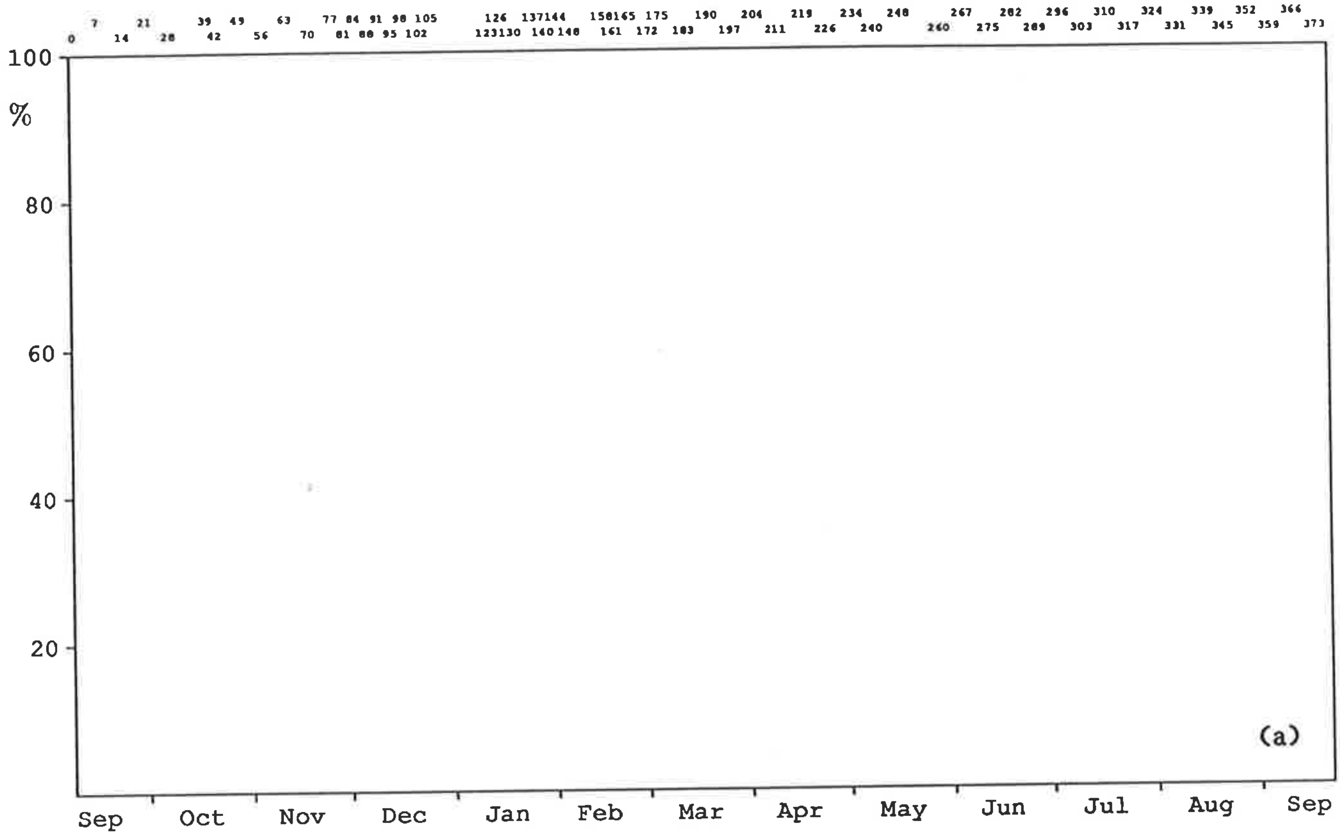


Figure 3.33.4 Percent composition based on biomass of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) ANA, CYN, MIC and UBG are shown. See Table 3.4 for taxa codes.



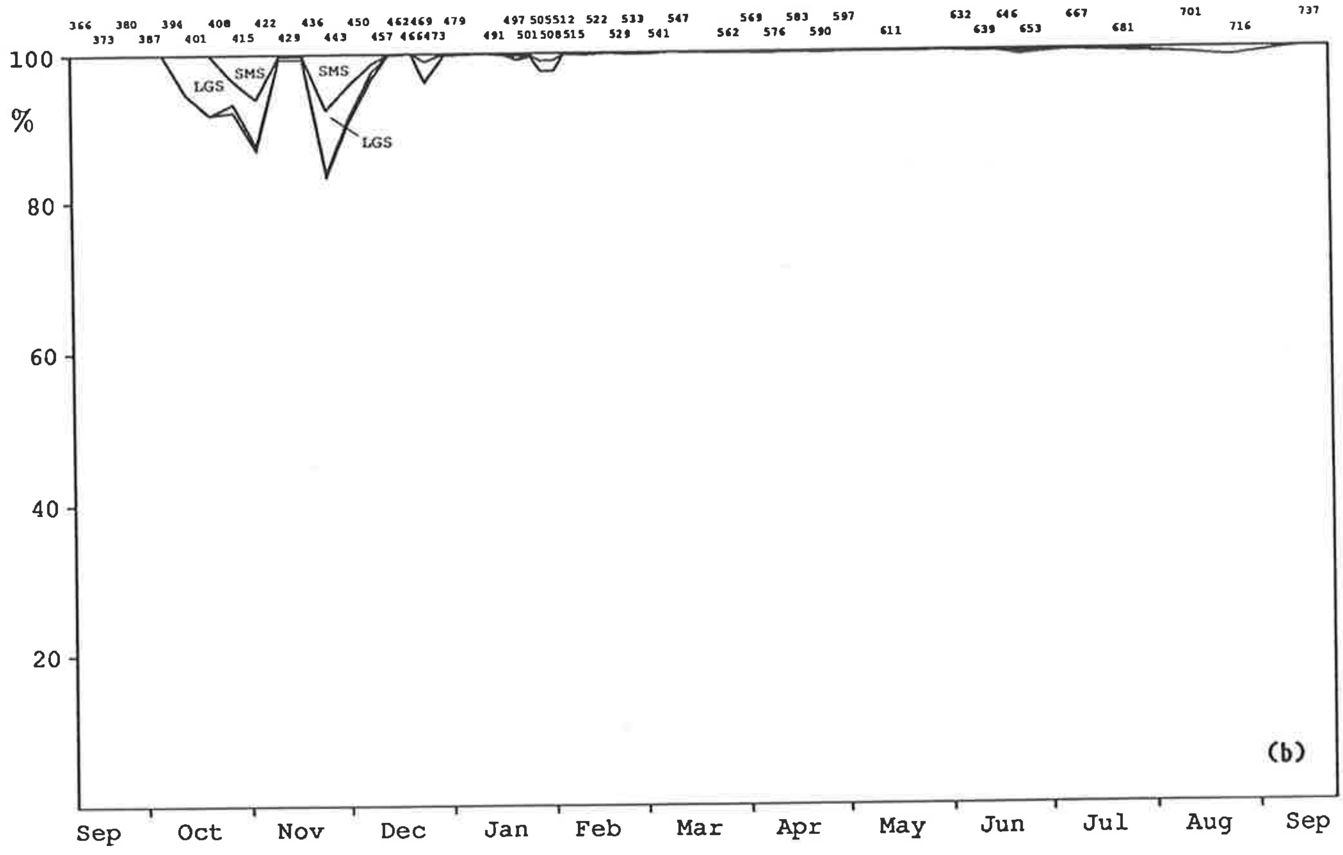


Figure 3.33.5 Percent composition based on biomass of the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983. The contributions of; (bottom to top) LSC, LGS and SMS are shown. See Table 3.4 for taxa codes.

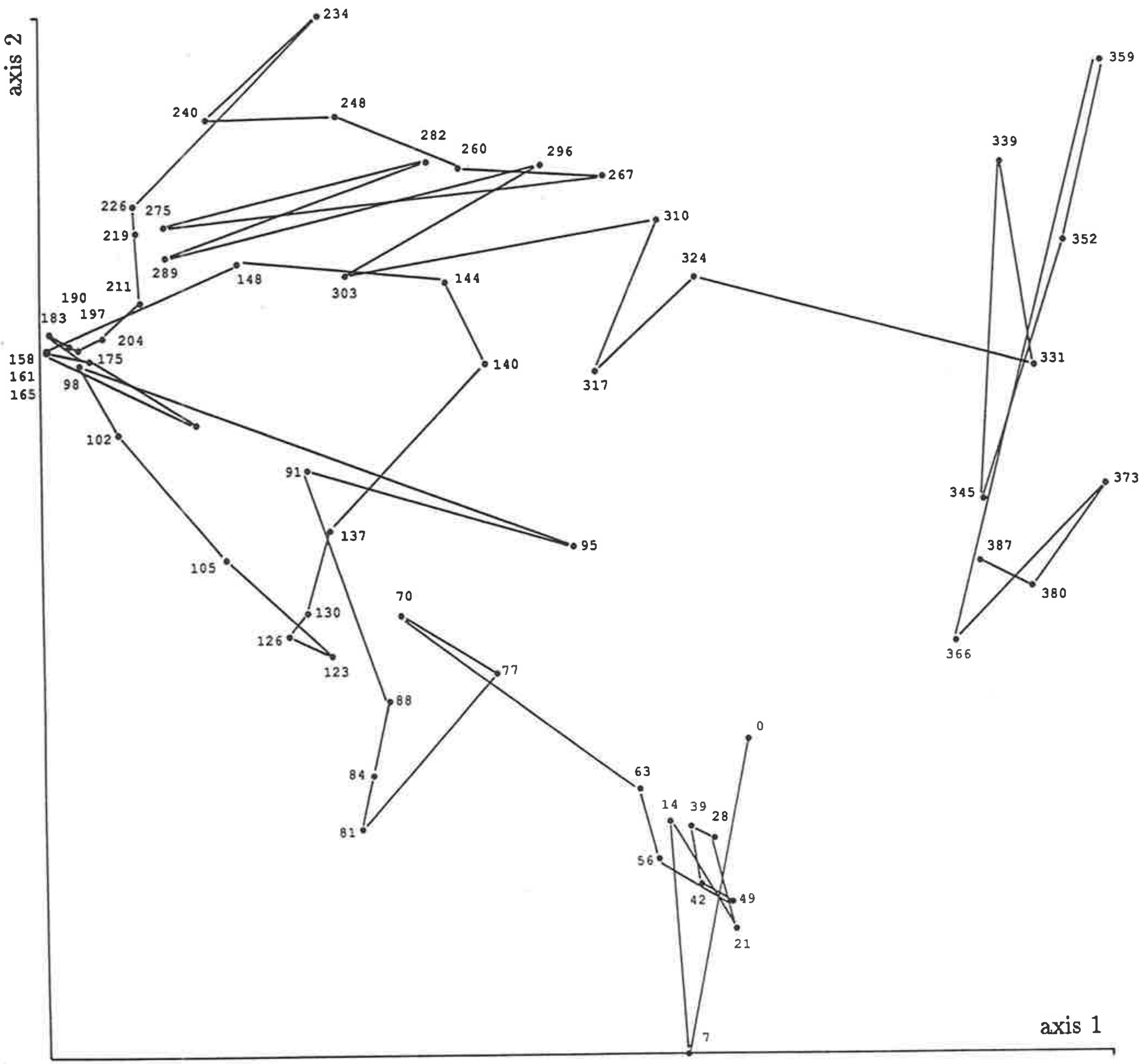


Figure 3.34a Detrended correspondence analysis ordination of the phytoplankton community in Mt Bold Reservoir during 1981/1982. Sampling dates are numbered and joined sequentially from the start of sampling.

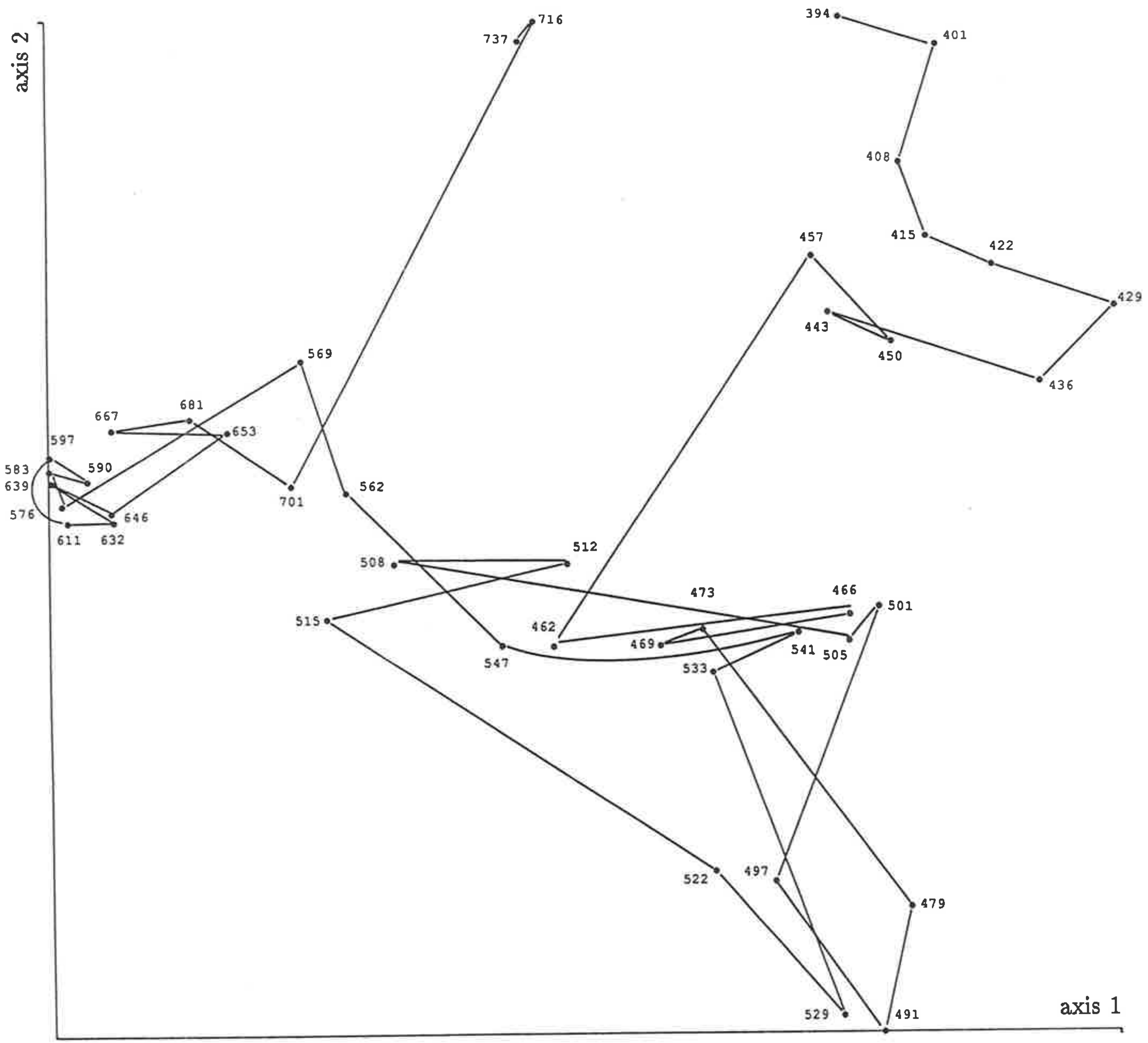


Figure 3.34b Detrended correspondence analysis ordination of the phytoplankton community in Mt Bold Reservoir during 1982/1983. Sampling dates are numbered and joined sequentially from the start of sampling.

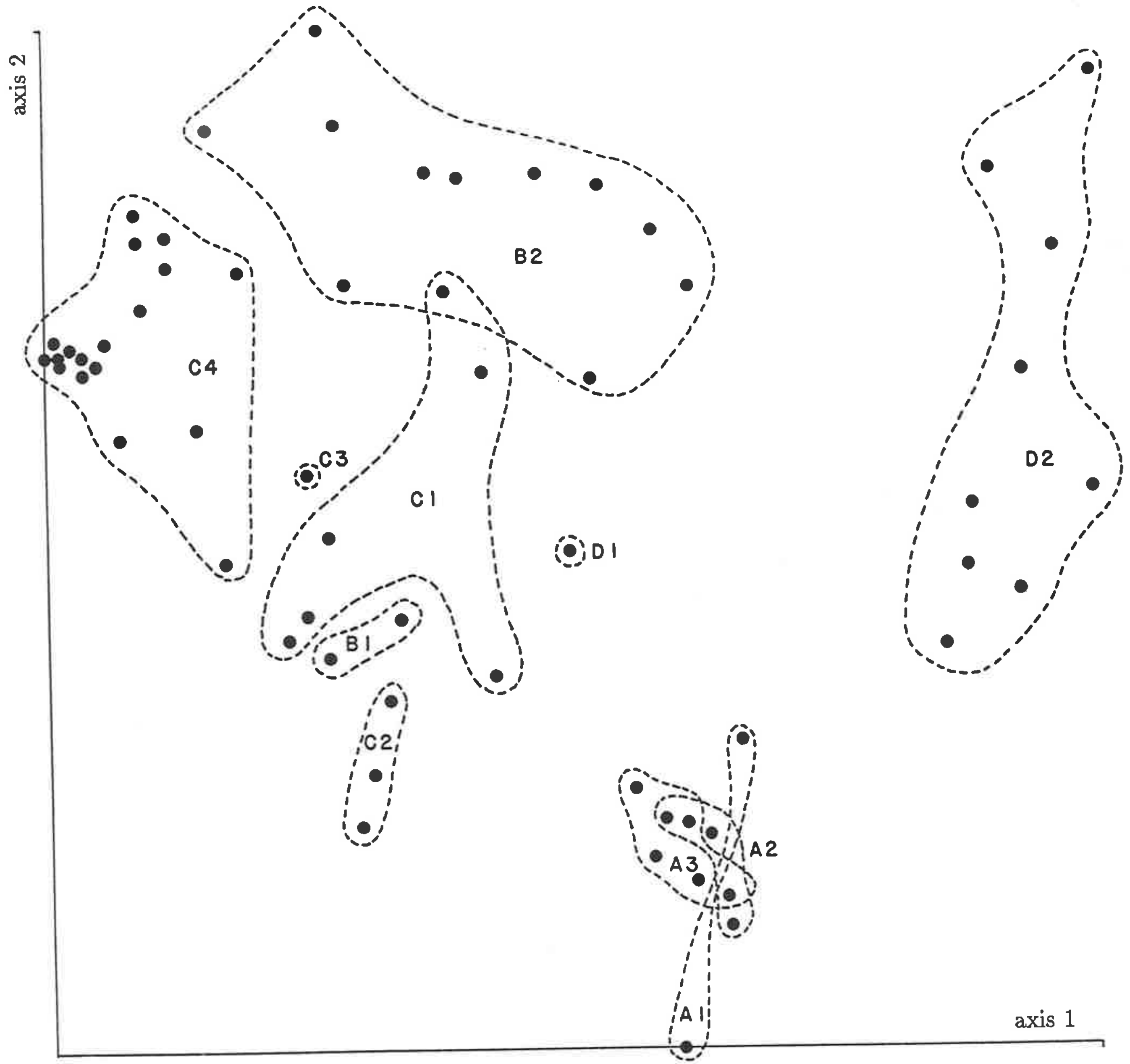


Figure 3.35a Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the phytoplankton community in Mt Bold Reservoir during 1981/1982. See text for explanation of groups.

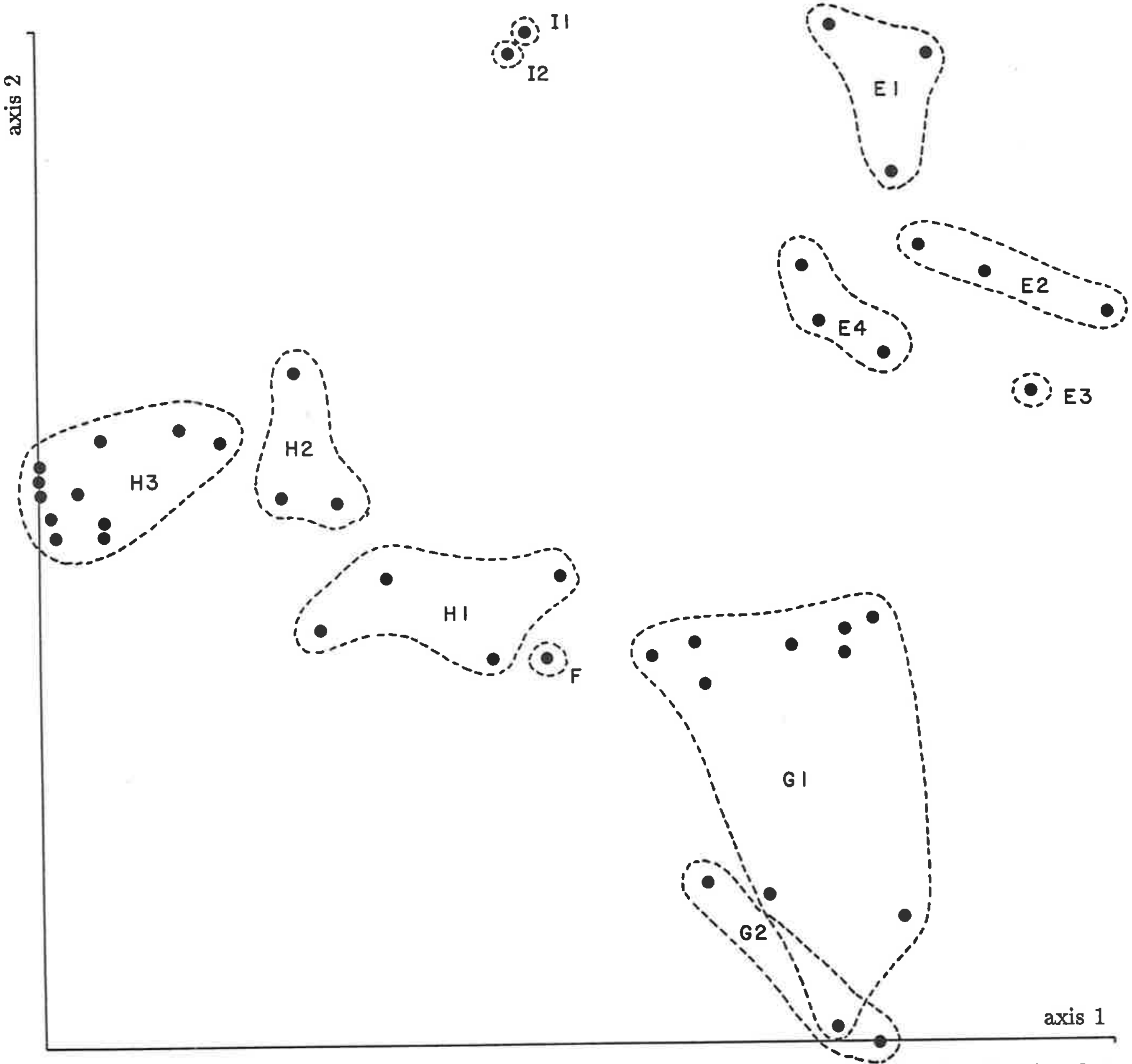


Figure 3.35b Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the phytoplankton community in Mt Bold Reservoir during 1982/1983. See text for explanation of groups.

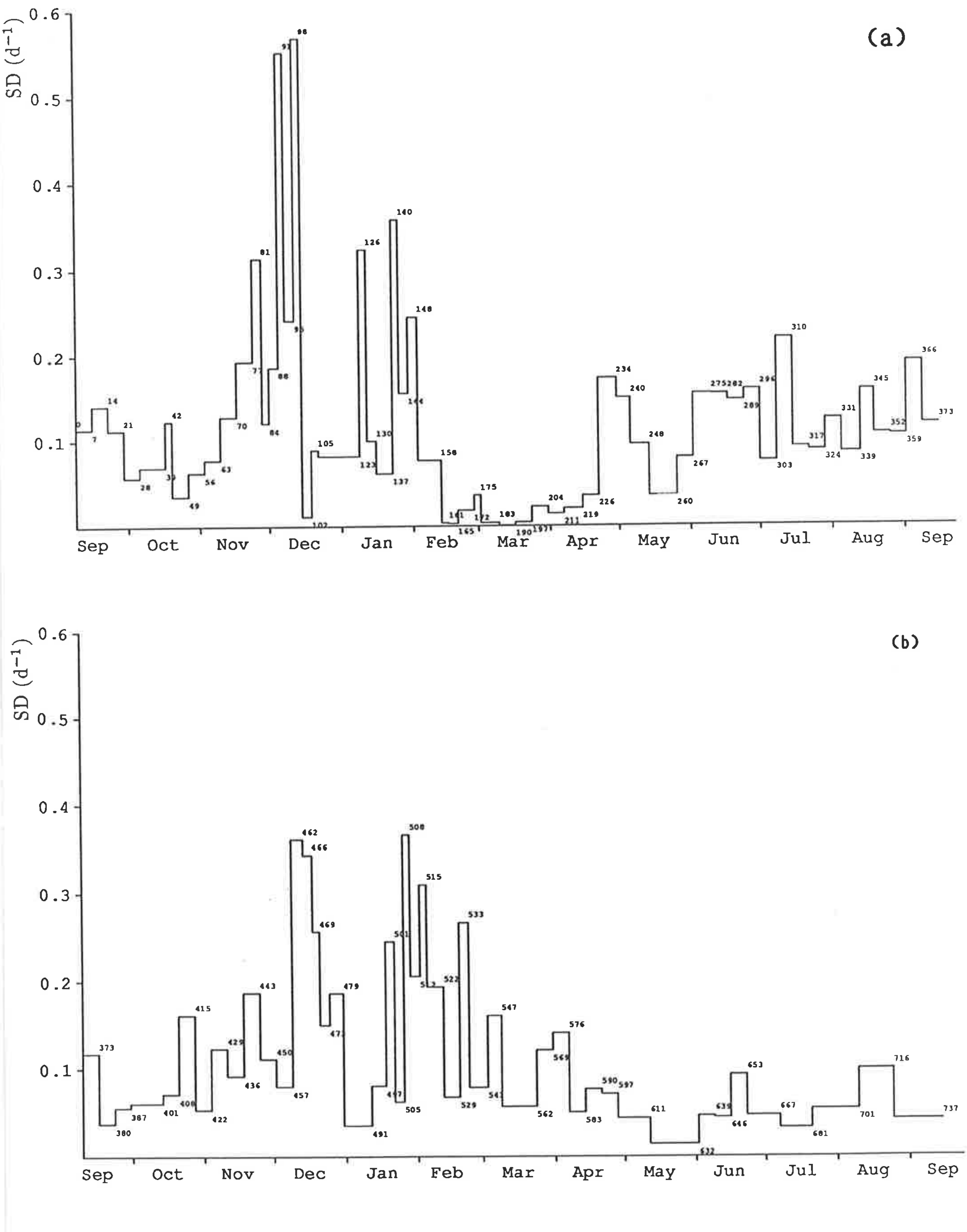


Figure 3.36 Summed difference [SD] (d^{-1}) index for the phytoplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

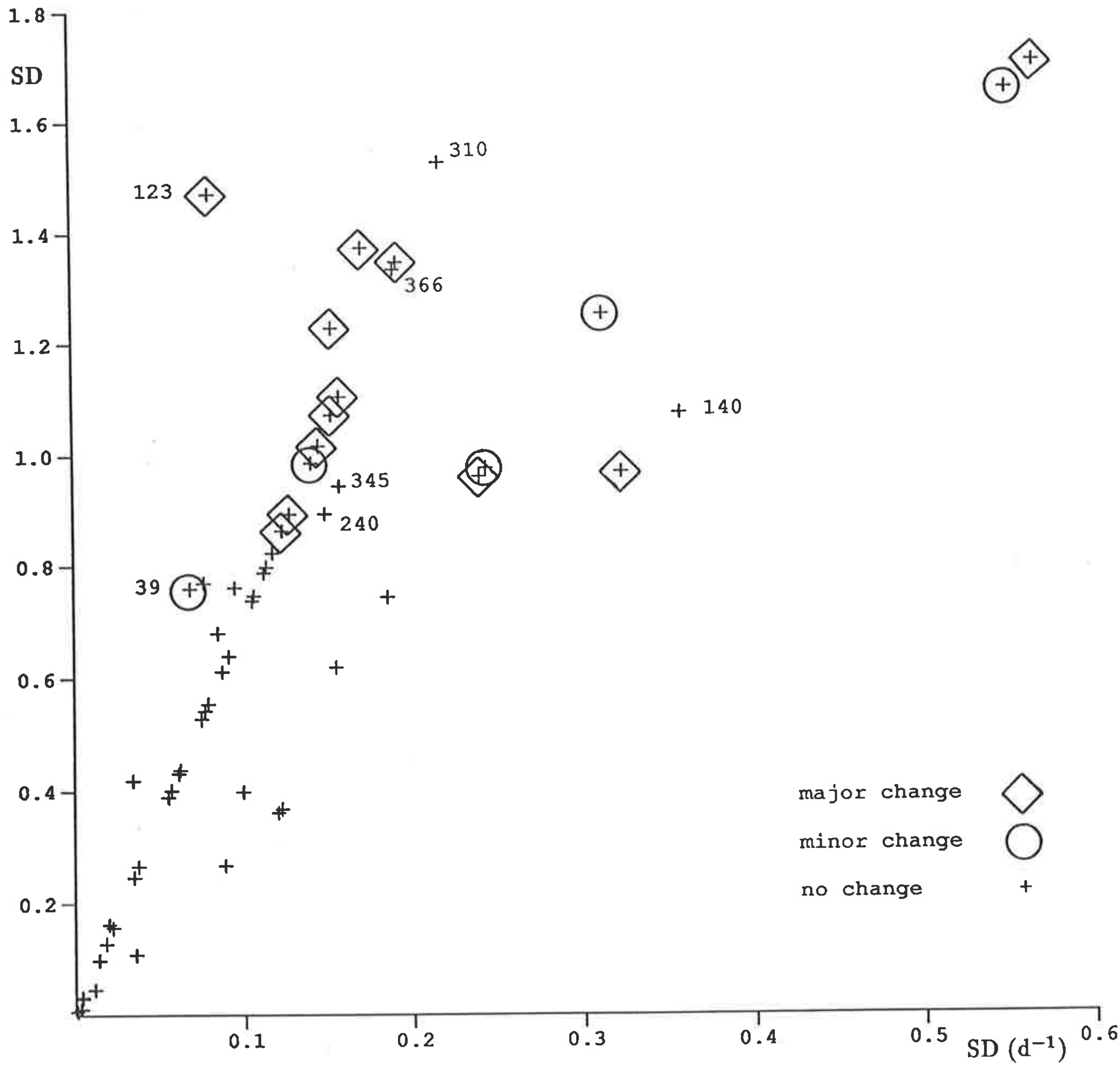


Figure 3.37a Position of each sampling interval with respect to SD rate (X axis) and absolute SD change (Y axis) during 1981/1982. Symbols indicate correspondence with MVA community changes.

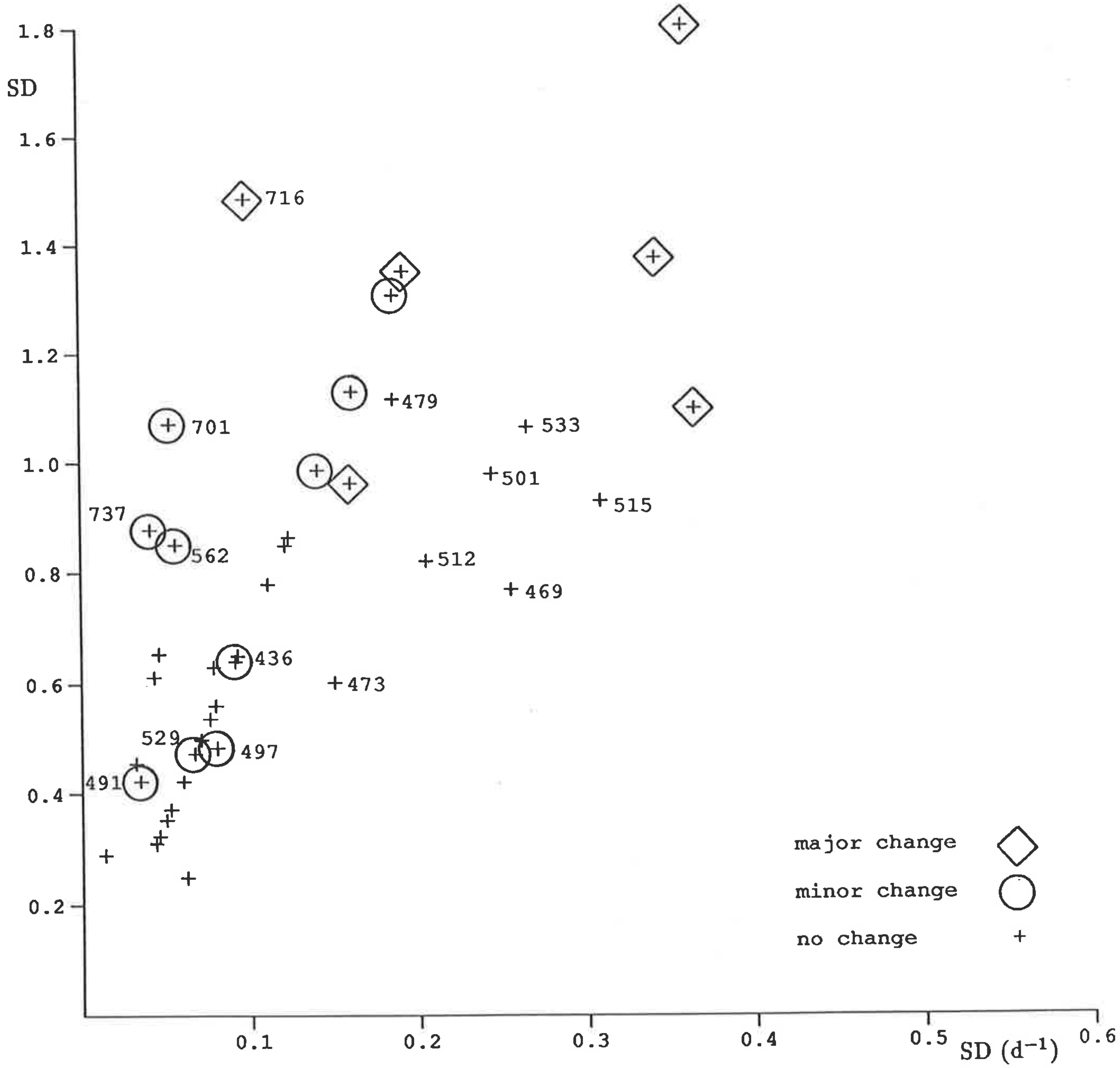


Figure 3.37b Position of each sampling interval with respect to SD rate (X axis) and absolute SD change (Y axis) during 1982/1983. Symbols indicate correspondence with MVA community changes.

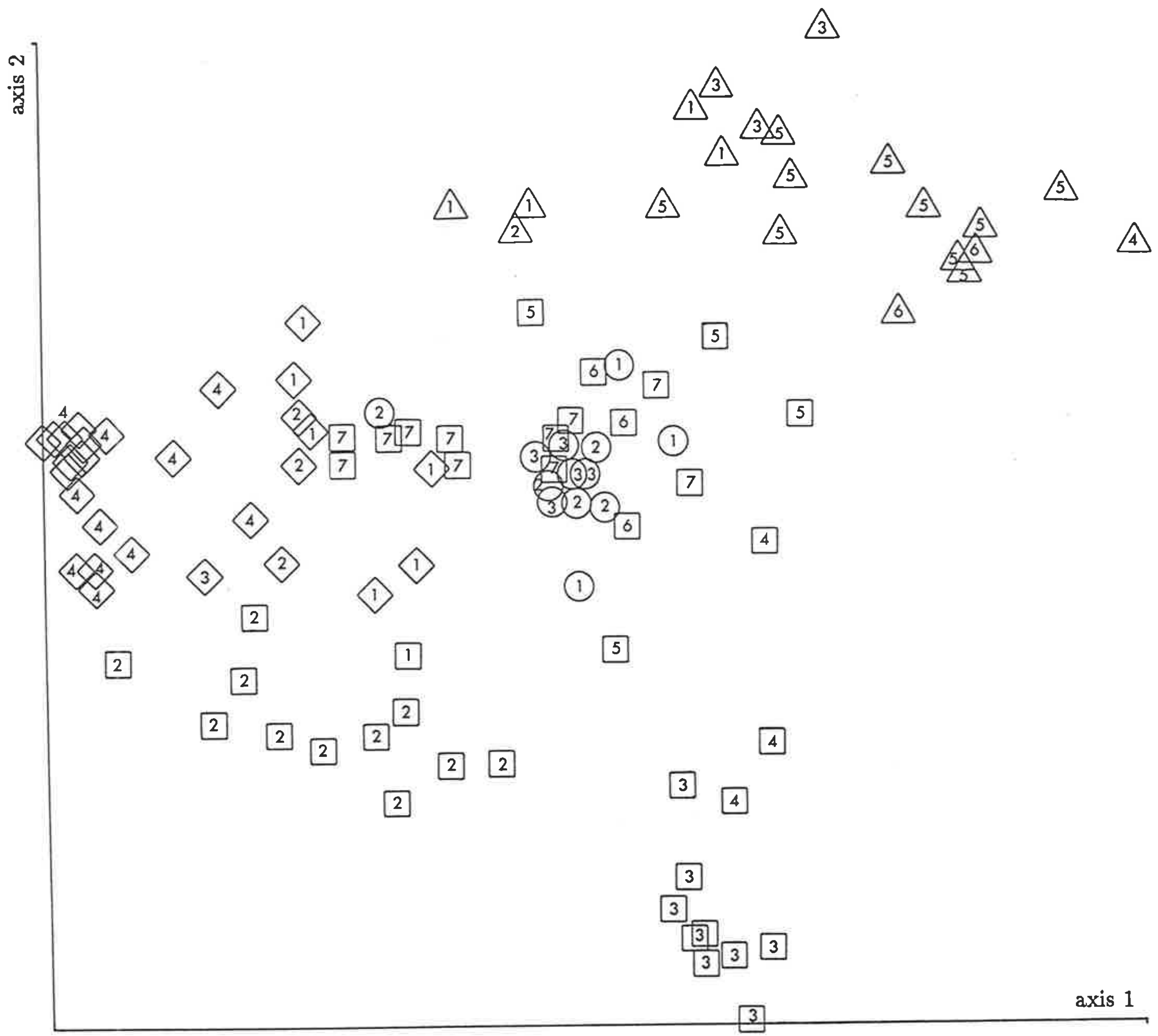


Figure 3.38 Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the phytoplankton community in Mt Bold Reservoir during the whole study period. Symbols indicate major communities, numbers within indicate minor communities.

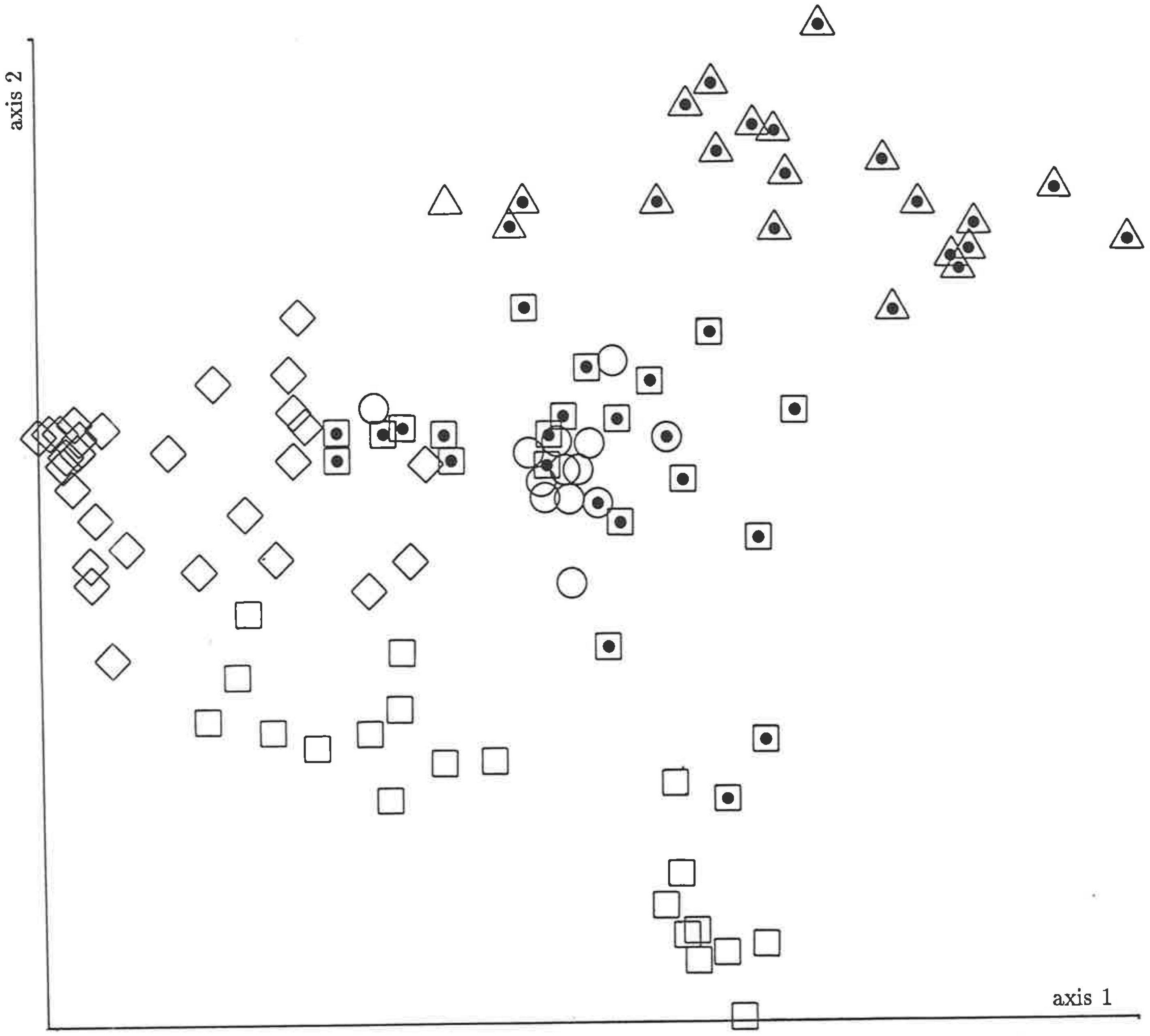


Figure 3.39 Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the phytoplankton community in Mt Bold Reservoir during the whole study period. Open symbols indicate 1981/1982 sample dates, dotted symbols indicate 1982/1983 sample dates.

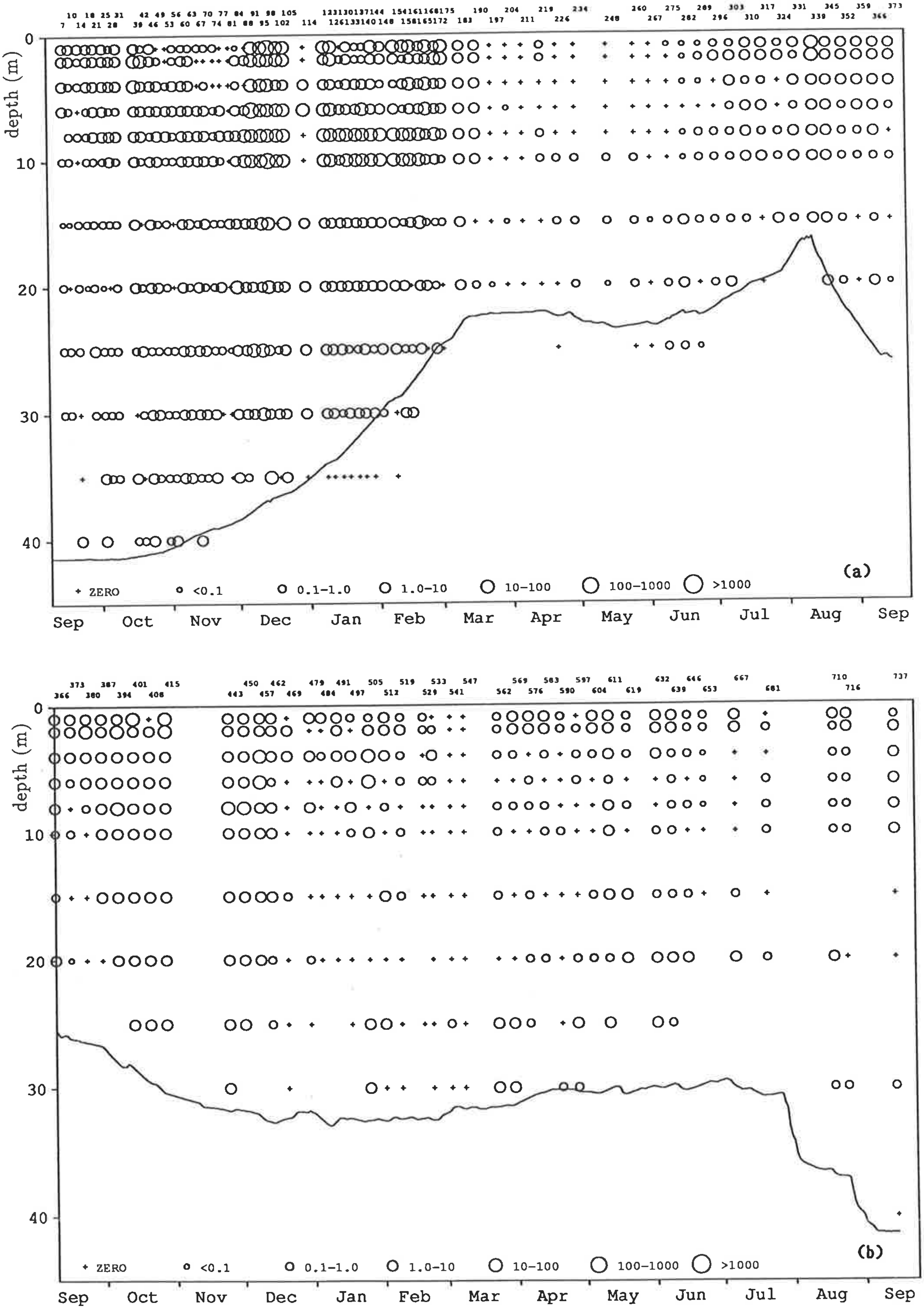


Figure 3.40.1 Depth distribution of *Boeckella triarticulata* [Bt] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

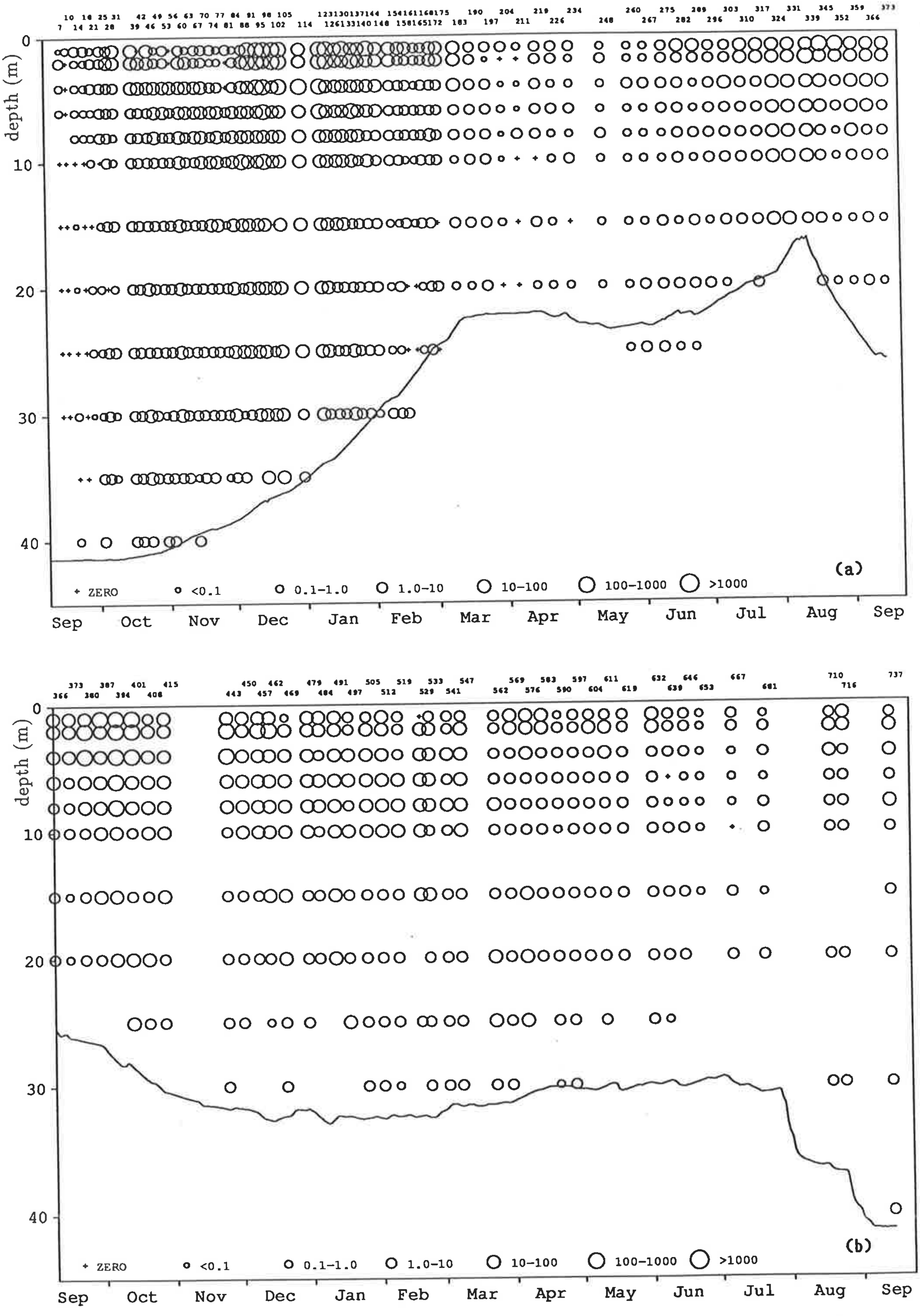


Figure 3.40.2 Depth distribution of *Calamoecia ampulla* [Ca] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

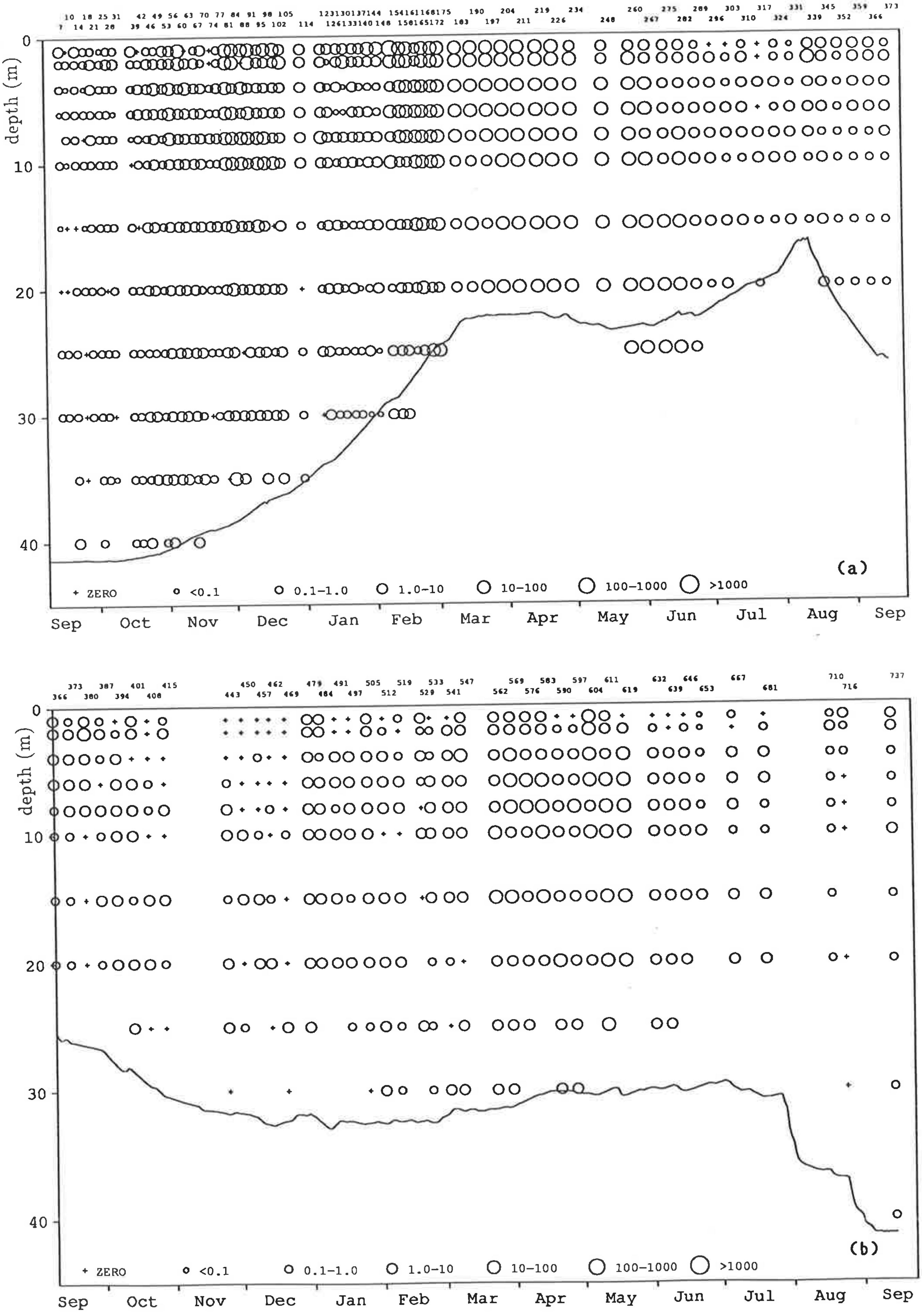


Figure 3.40.3 Depth distribution of cyclopoid copepod [Cy] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

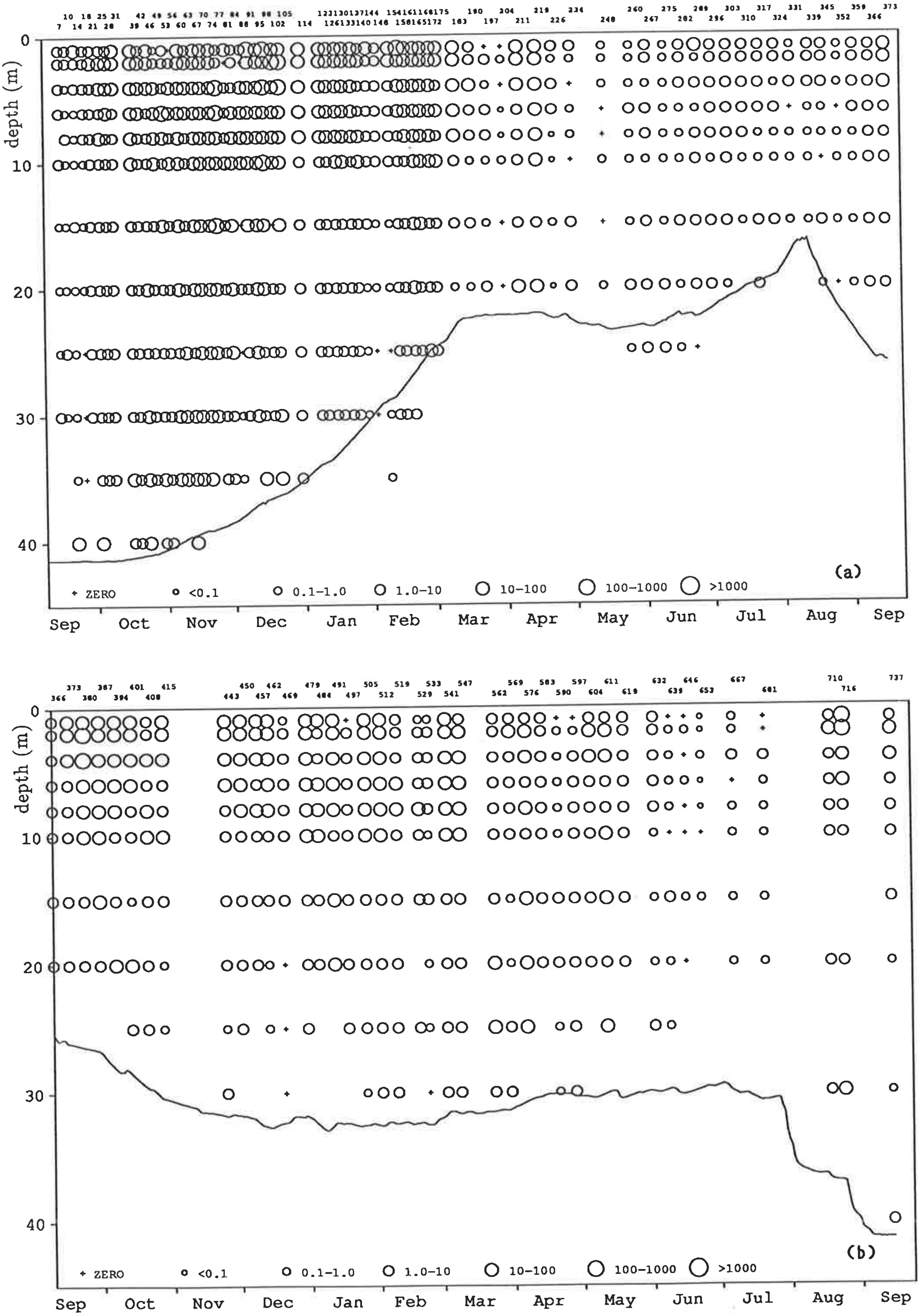


Figure 3.40.4 Depth distribution of calanoid copepodite [cc] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

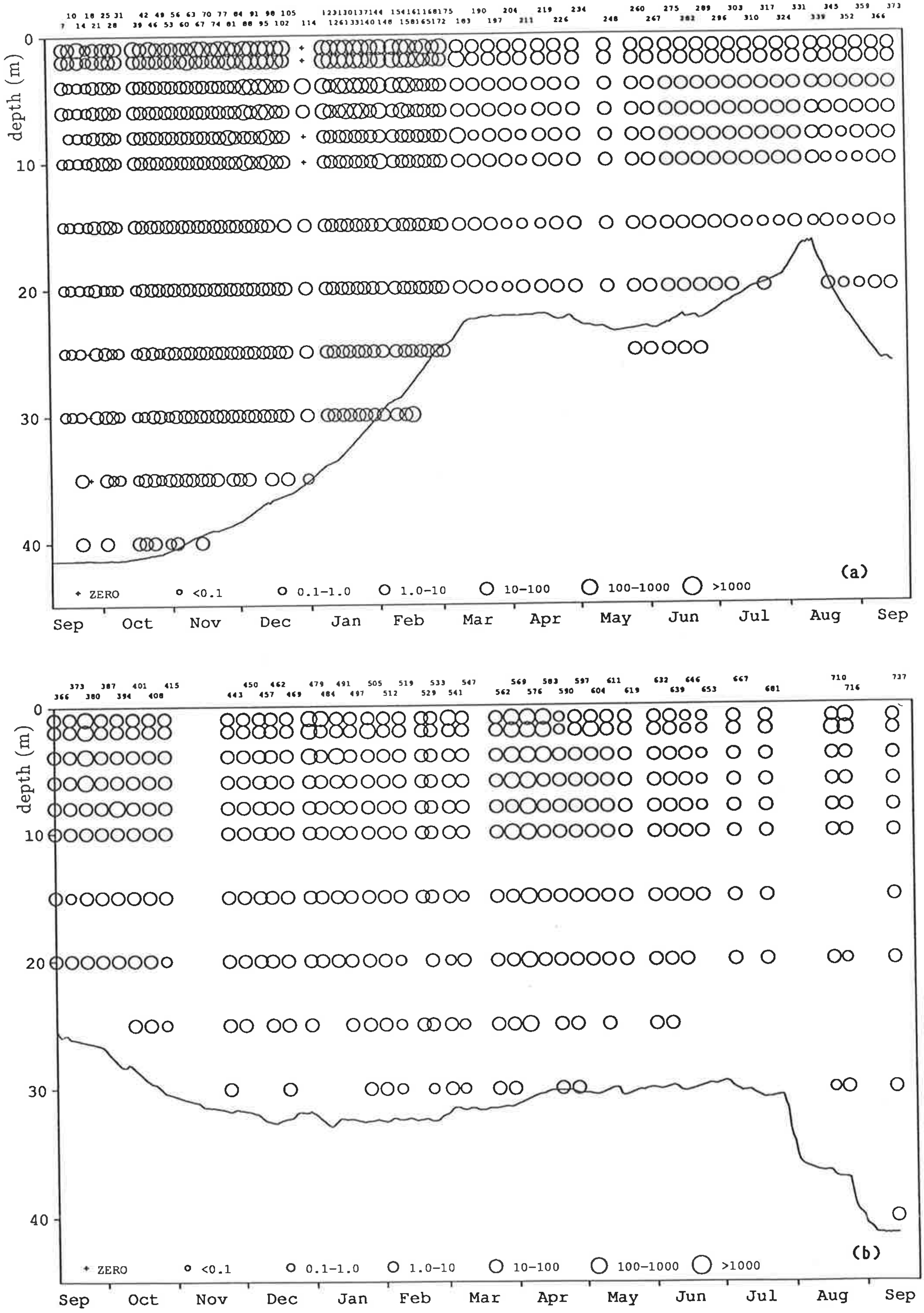


Figure 3.40.5 Depth distribution of copepod nauplii [cn] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

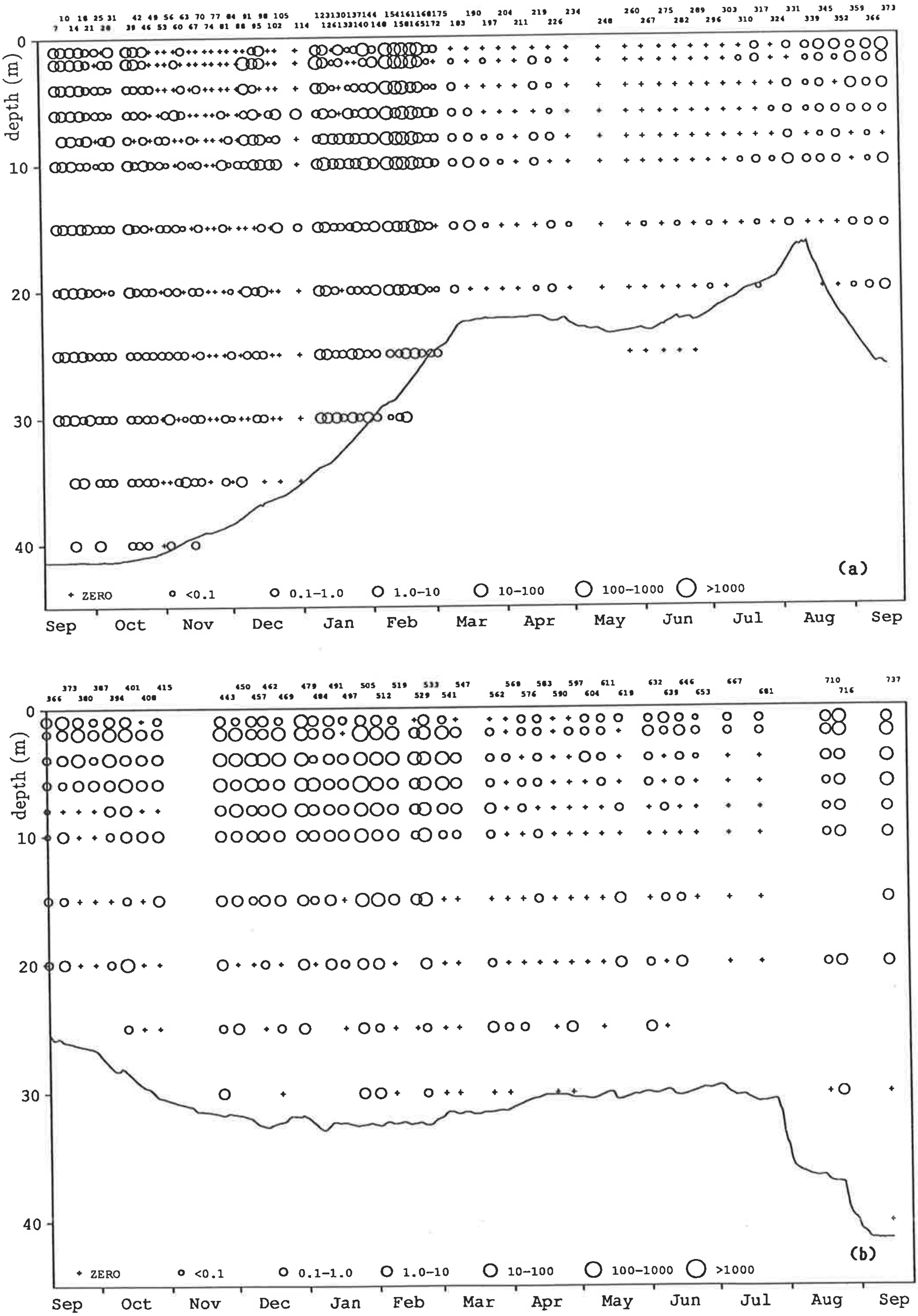
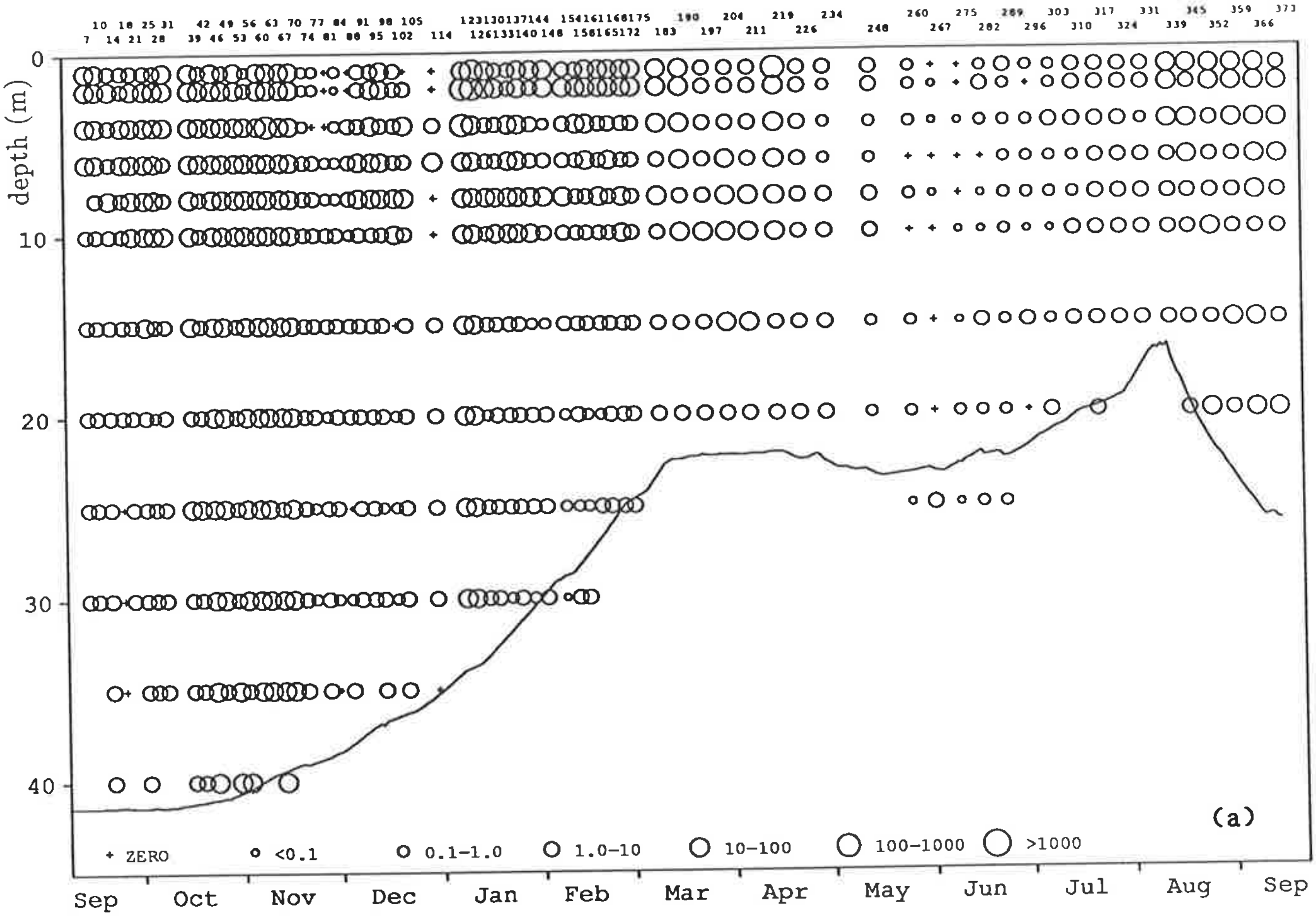


Figure 3.40.6 Depth distribution of *Daphnia carinata* [Dc] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.



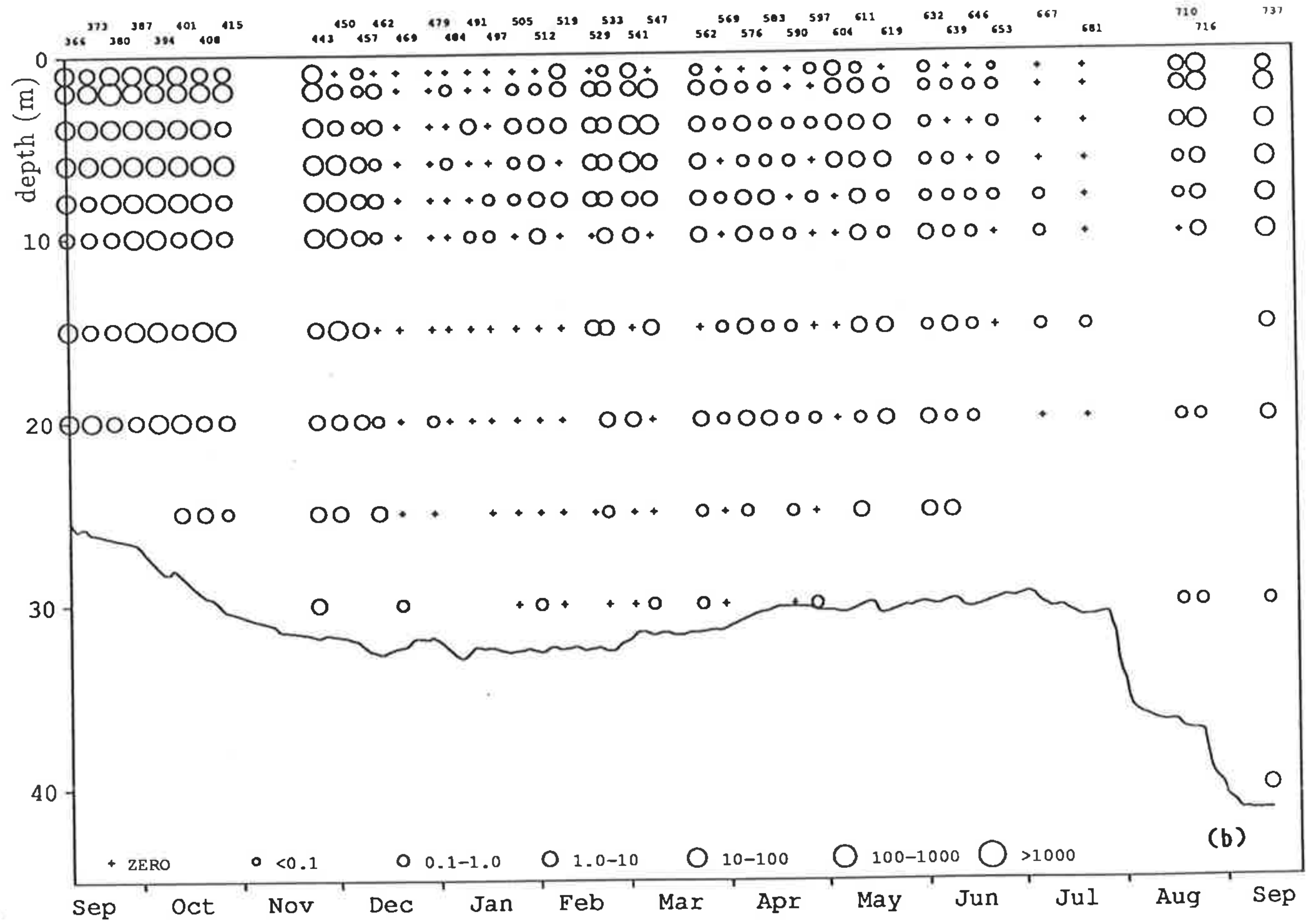


Figure 3.40.7 Depth distribution of *Ceriodaphnia quadrangula* [Cq] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

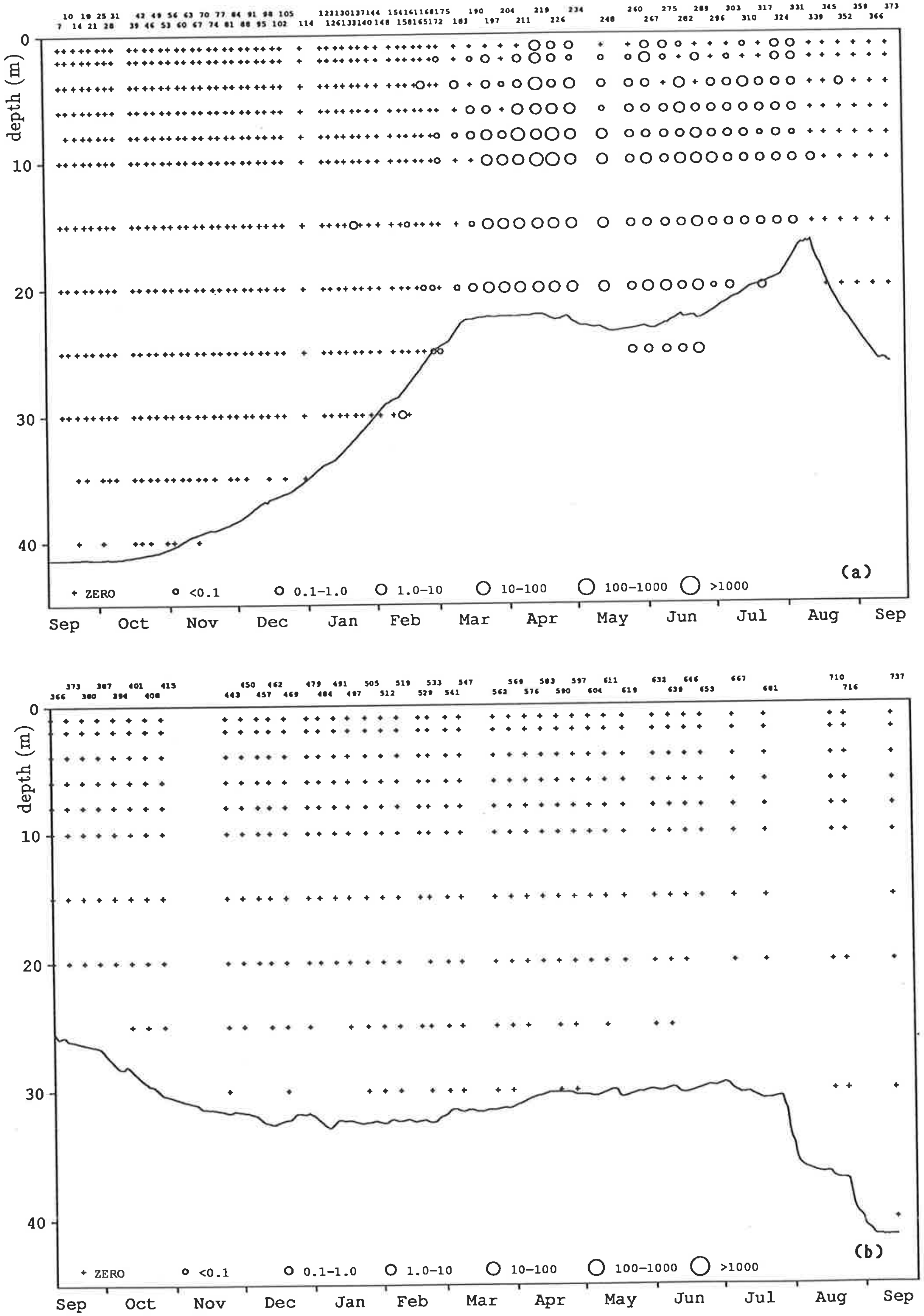


Figure 3.40.8 Depth distribution of *Ceriodaphnia cornuta* [Cc] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

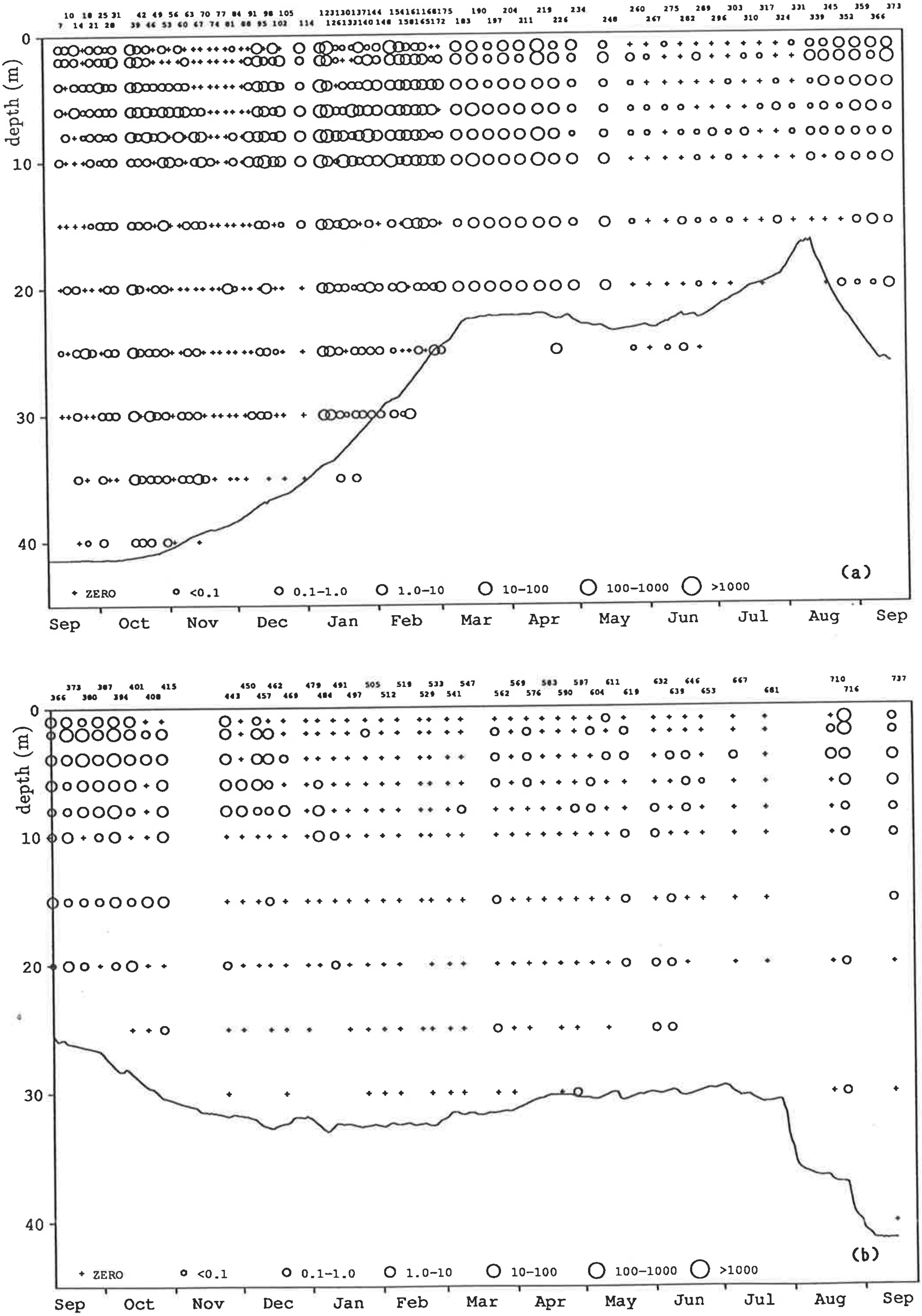


Figure 3.40.9 Depth distribution of *Diaphanosoma unguiculatum* [Du] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

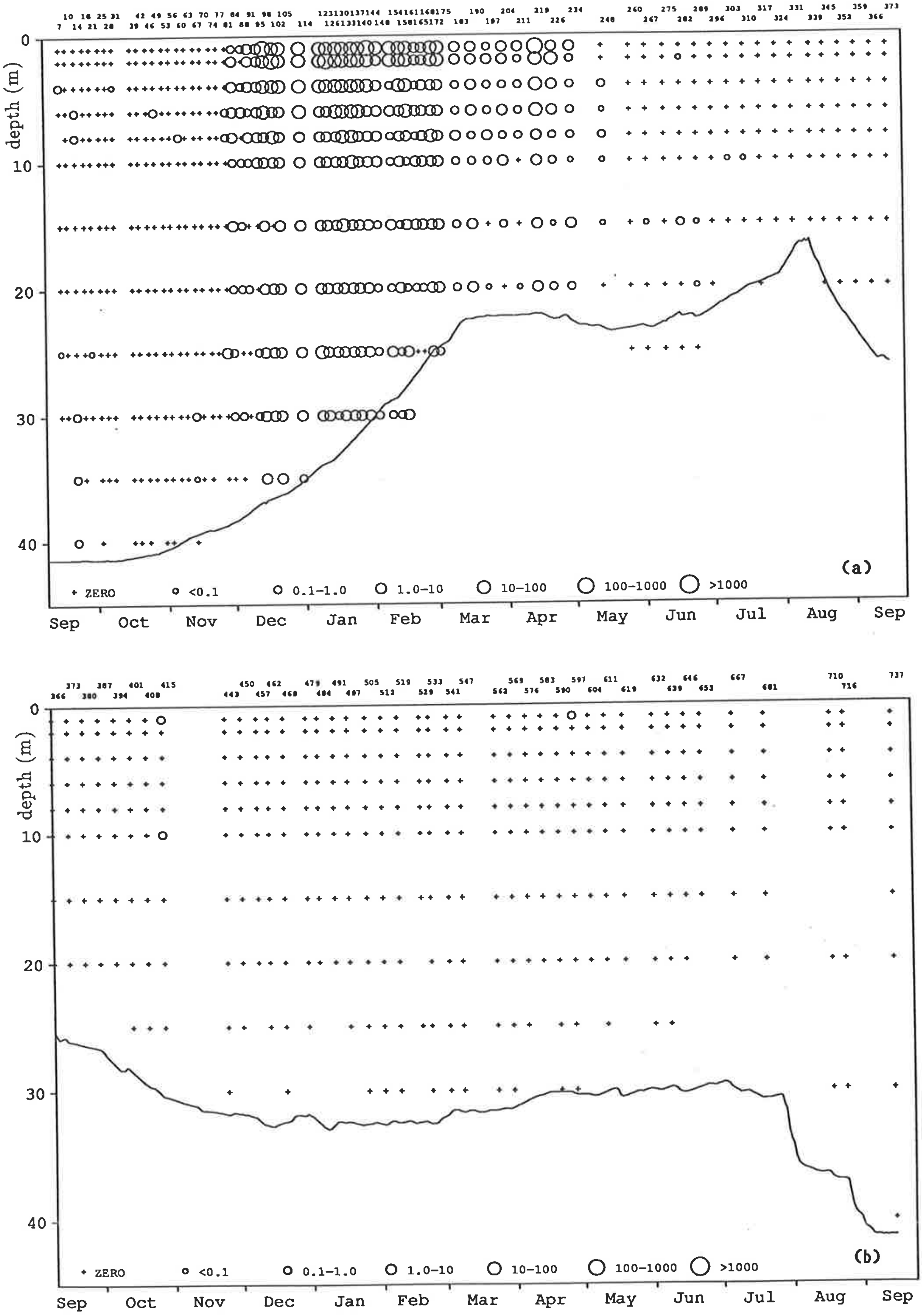


Figure 3.40.10 Depth distribution of *Bosmina meridionalis* [Bm] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

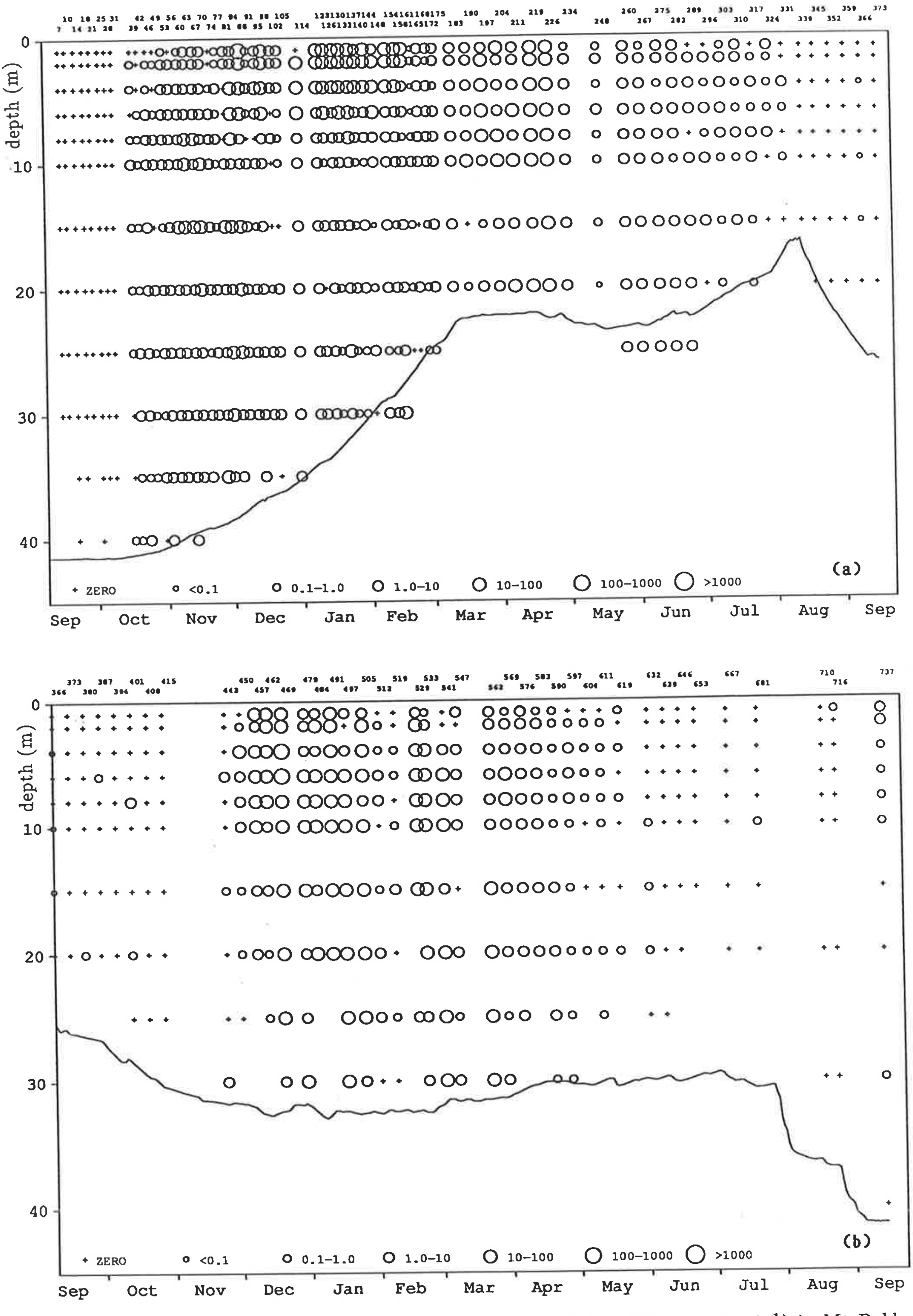


Figure 3.40.11 Depth distribution of *Hexarthra* sp. [Hx] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

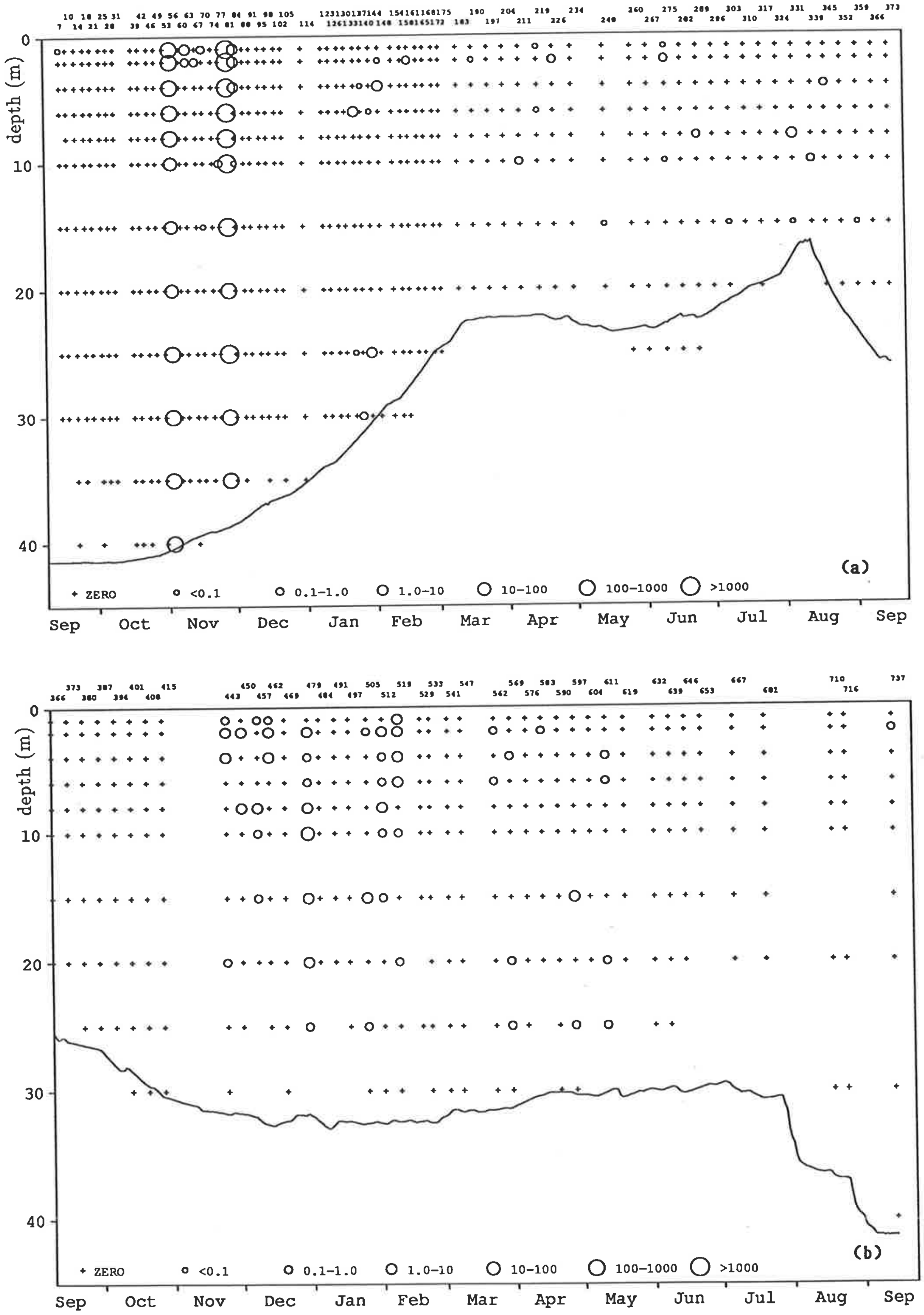


Figure 3.40.12 Depth distribution of *Syncheata* spp. [Sy] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

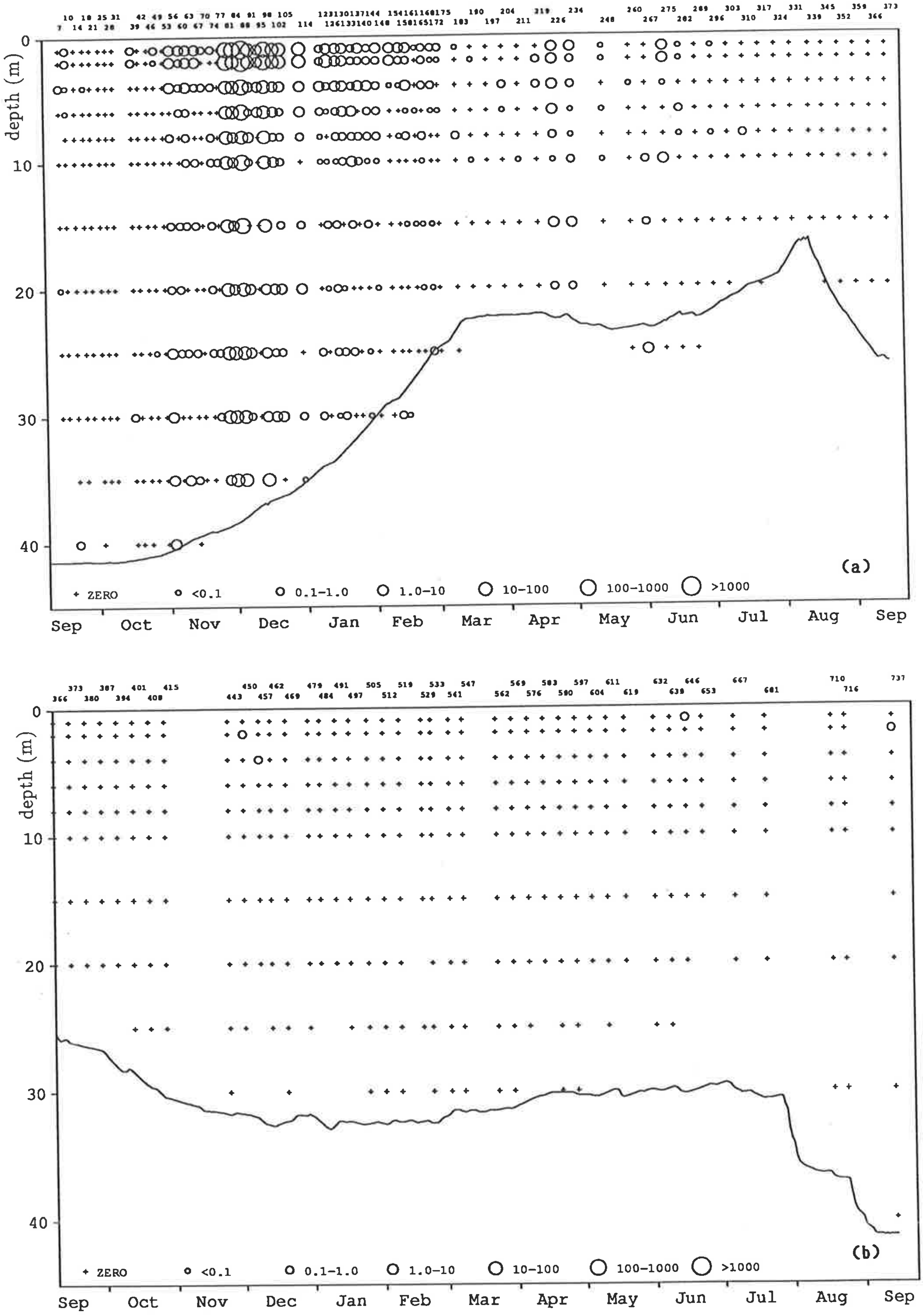


Figure 3.40.13 Depth distribution of *Keratella* spp. [Kt] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

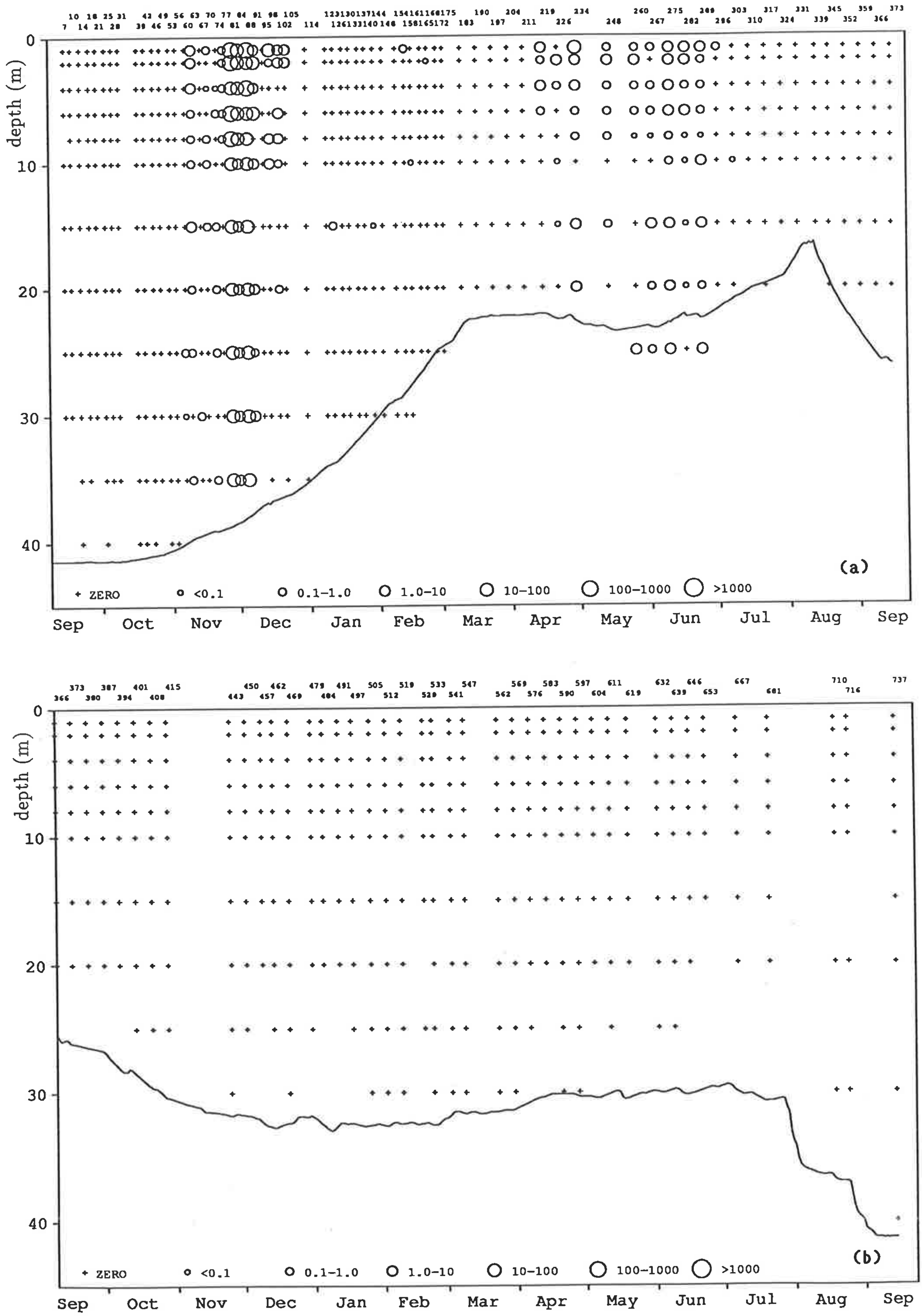


Figure 3.40.14 Depth distribution of *Polyarthra* spp. [Py] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

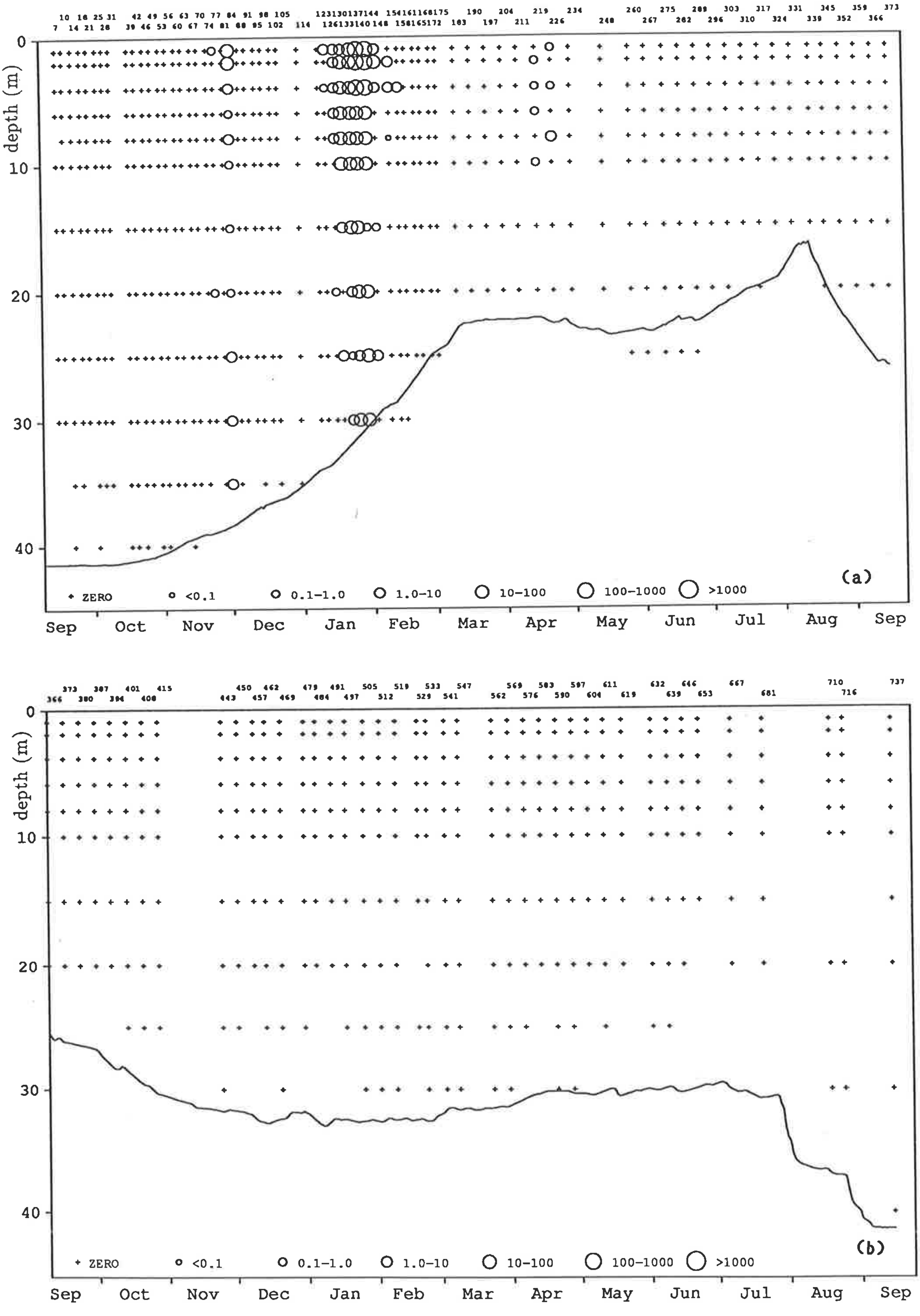


Figure 3.40.15 Depth distribution of *Conochilus* sp. [Ch] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

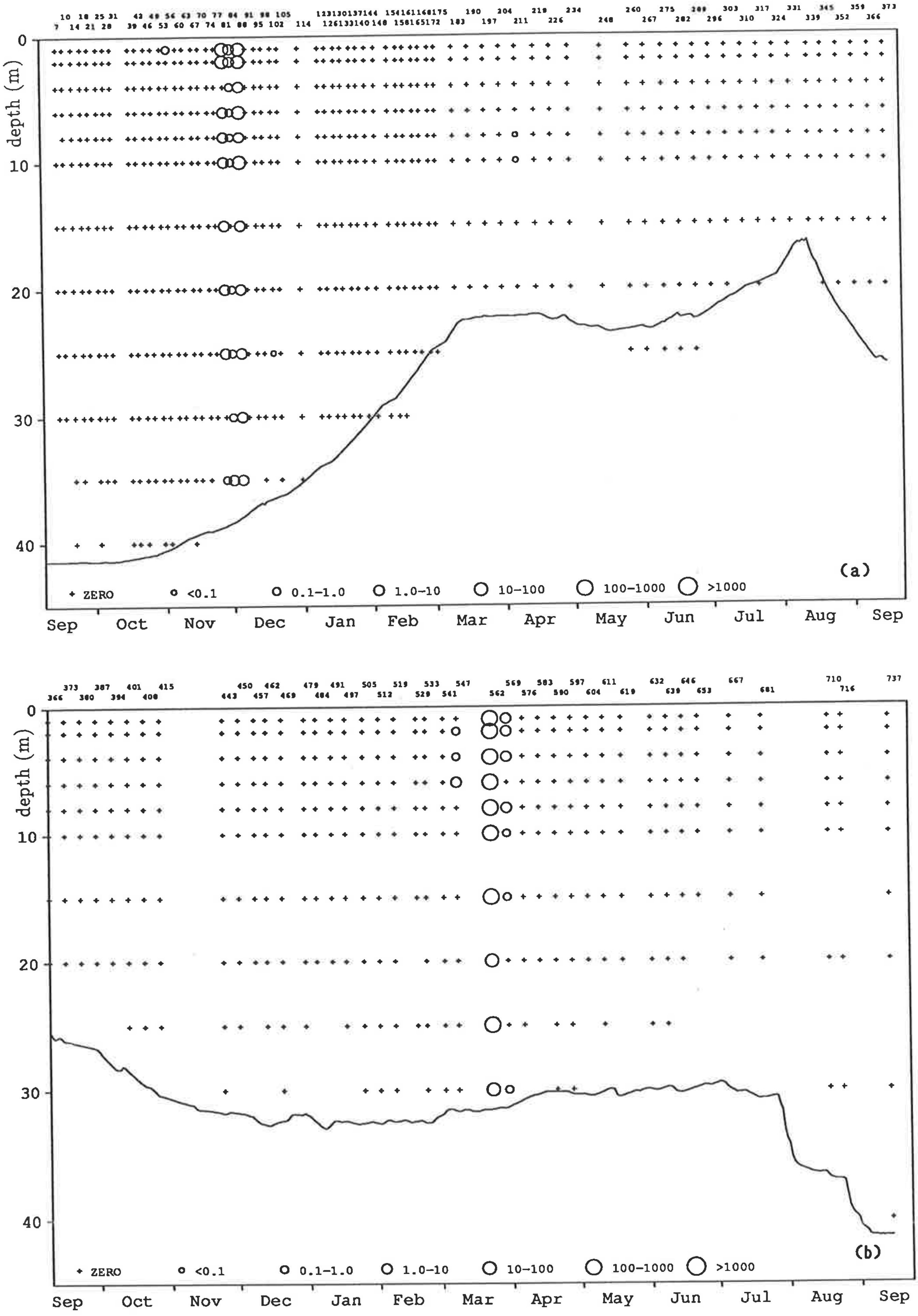


Figure 3.40.16 Depth distribution of *Asplanchna* spp. [Ap] density (number l^{-1}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

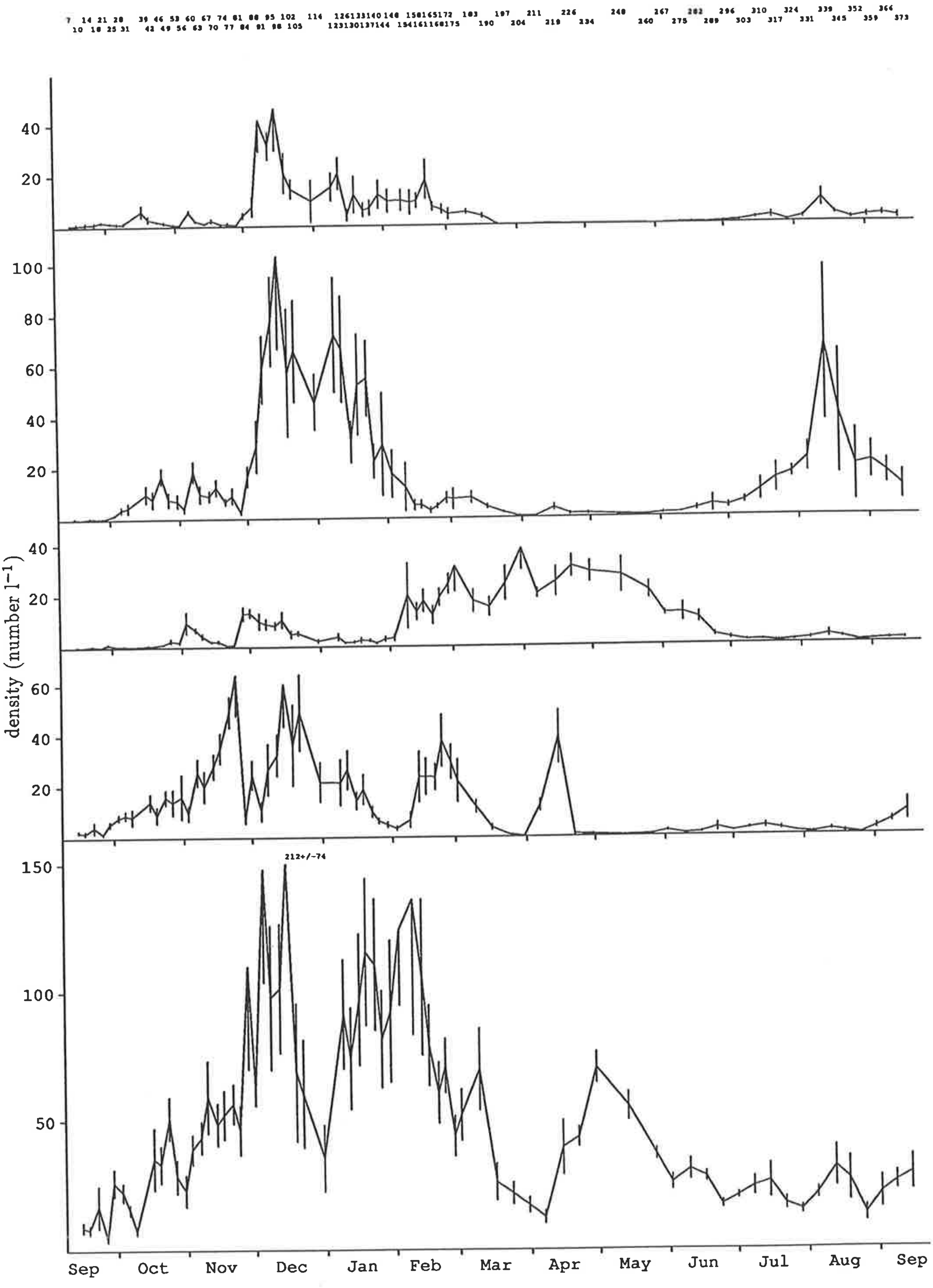


Figure 3.41.1a Mean (±se) density (number l^{-1}) of the copepods; (top to bottom) *Boeckella triarticulata, Calamoecia ampulla,* cyclopoid copepod, calanoid copepodite, and copepod nauplii in Mt Bold Reservoir during 1981/1982.

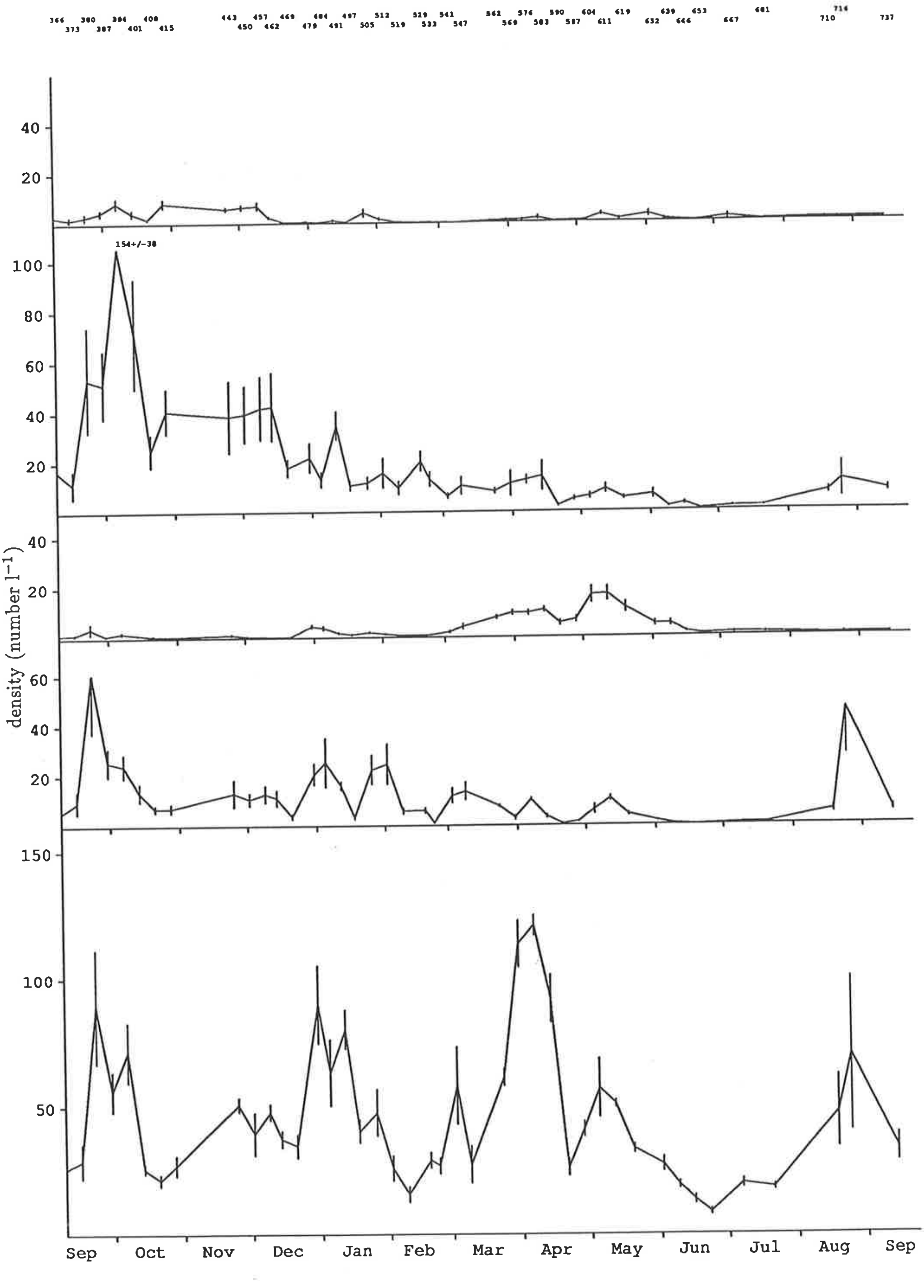


Figure 3.41.1b Mean (±se) density (number l^{-1}) of the copepods; (top to bottom) *Boeckella triarticulata*, *Calamoecia ampulla*, cyclopoid copepod, calanoid copepodite, and copepod nauplii in Mt Bold Reservoir during 1982/1983.

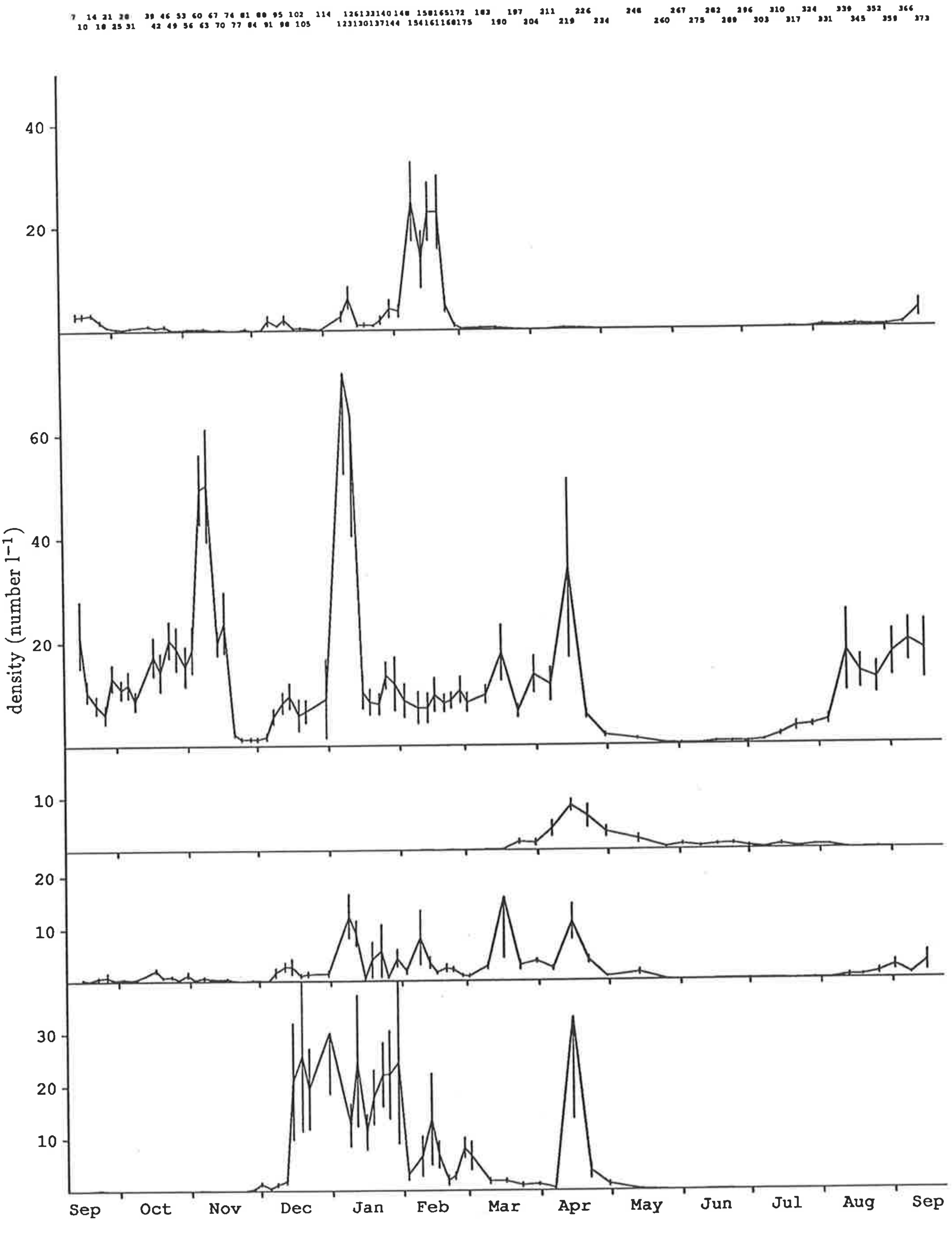


Figure 3.41.2a Mean (±se) density (number l^{-1}) of the cladocerans; (top to bottom) *Daphnia carinata, Ceriodaphnia quadrangula, Ceriodaphnia cornuta, Diaphanosoma unguiculatum,* and *Bosmina meridionalis* in Mt Bold Reservoir during 1981/1982.

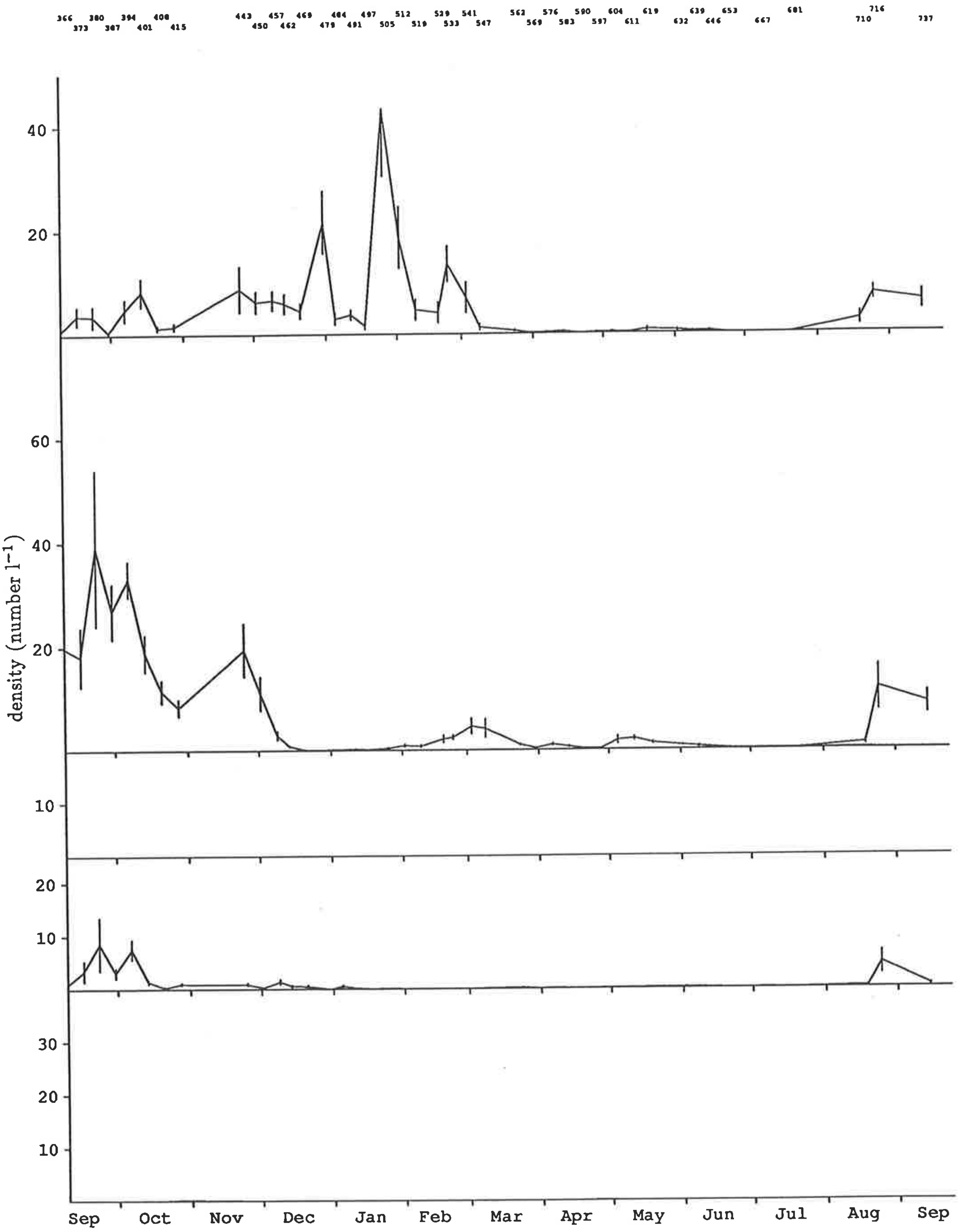


Figure 3.41.2b Mean (±se) density (number l^{-1}) of the cladocerans; (top to bottom) *Daphnia carinata*, *Ceriodaphnia quadrangula*, *Ceriodaphnia cornuta*, *Diaphanosoma unguiculatum*, and *Bosmina meridionalis* in Mt Bold Reservoir during 1982/1983.

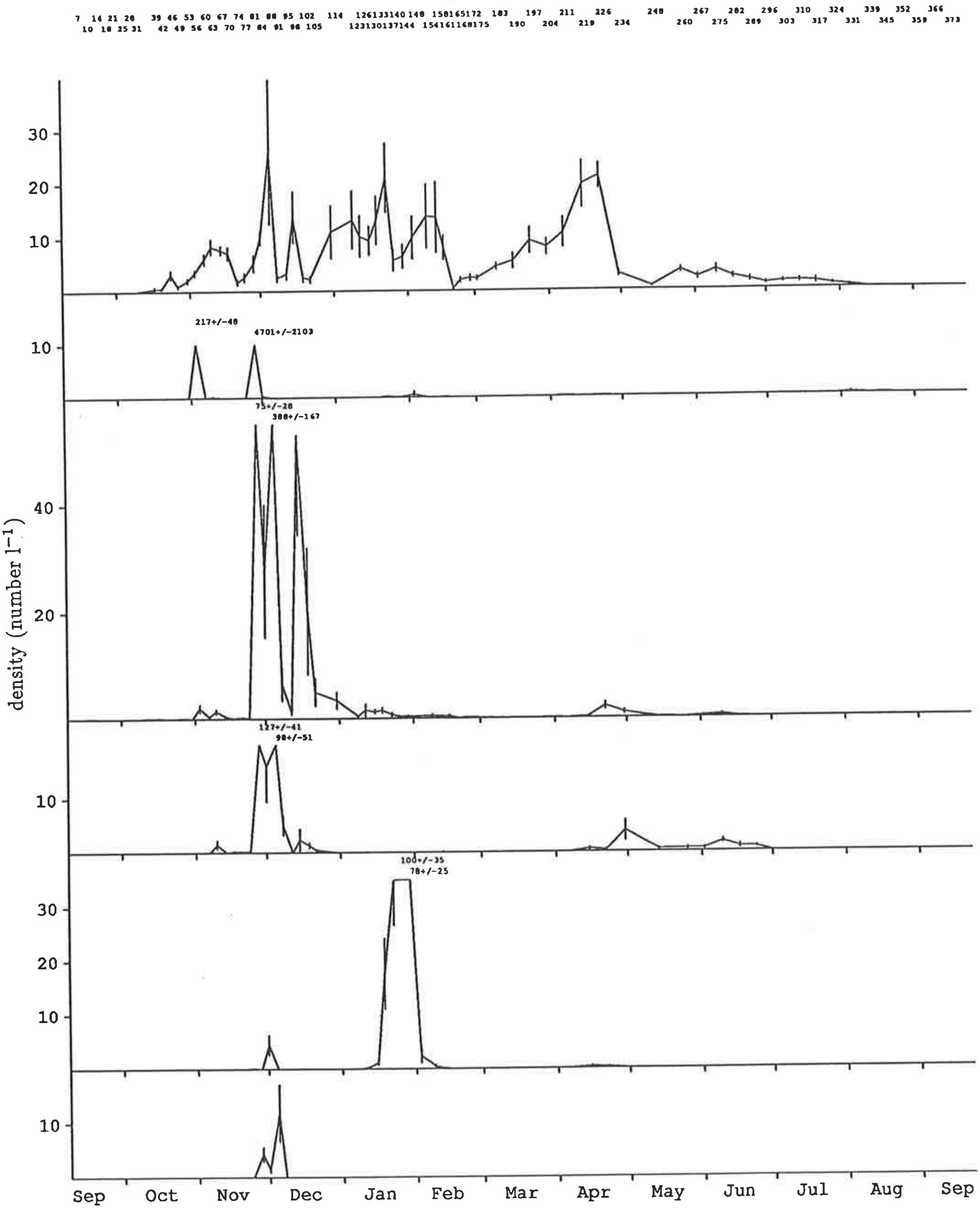


Figure 3.41.3a Mean (±se) density (number l^{-1}) of the rotifers; (top to bottom) *Hexarthra* sp., *Syncheata* spp., *Keratella* spp., *Polyarthra* spp., *Conochilus* sp., and *Asplanchna* sp. in Mt Bold Reservoir during 1981/1982.

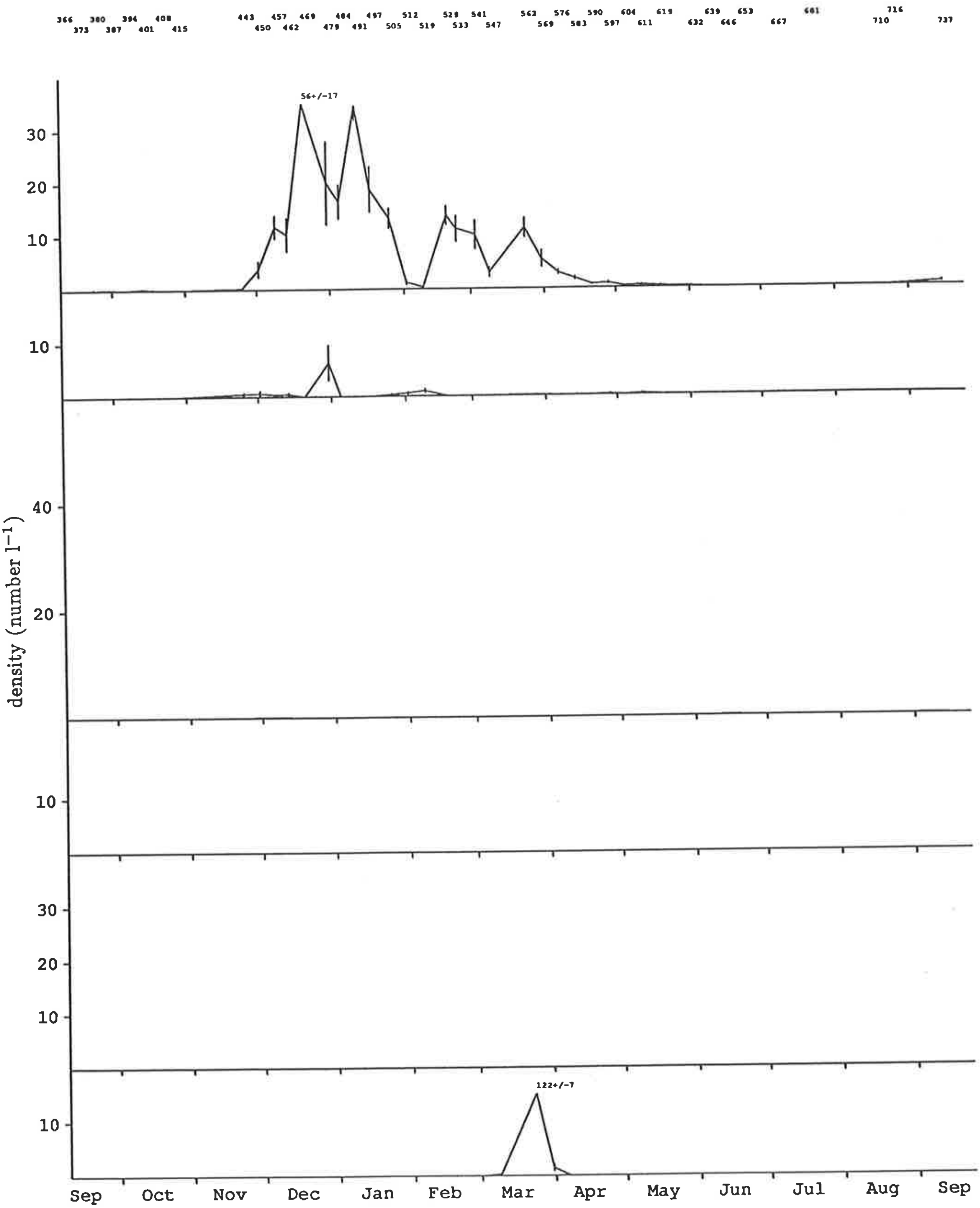


Figure 3.41.3b Mean (±se) density (number l^{-1}) of the rotifers; (top to bottom) *Hexarthra* sp., *Syncheata* spp., *Keratella* spp., *Polyarthra* spp., *Conochilus* sp., and *Asplanchna* sp. in Mt Bold Reservoir during 1982/1983.

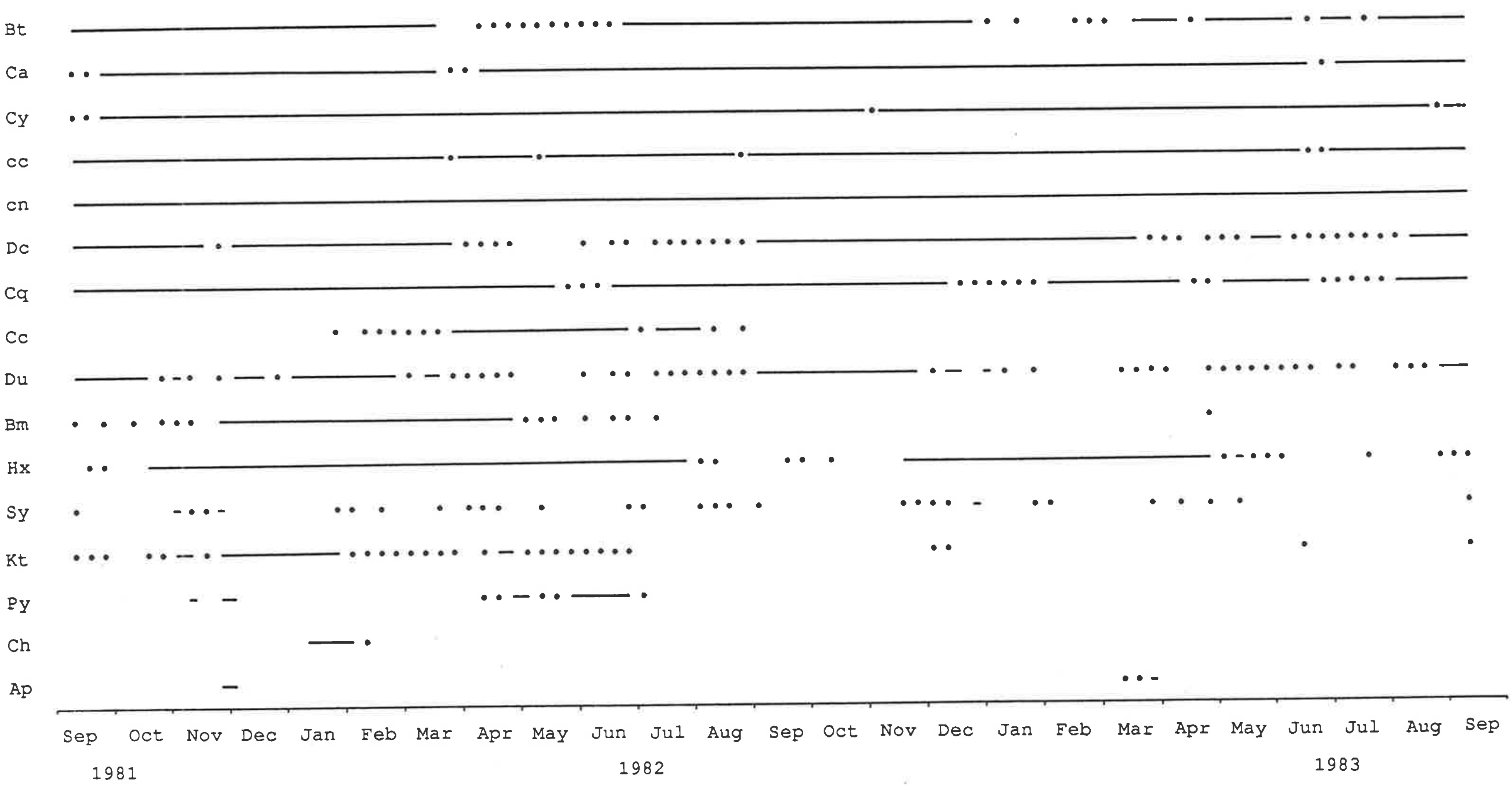


Figure 3.42 Weekly occurence of zooplankton taxa in Mt Bold Reservoir during the study period. Solid line represents substantial presence; dot represents sporadic occurence. Taxa codes as in Figure 3.40.

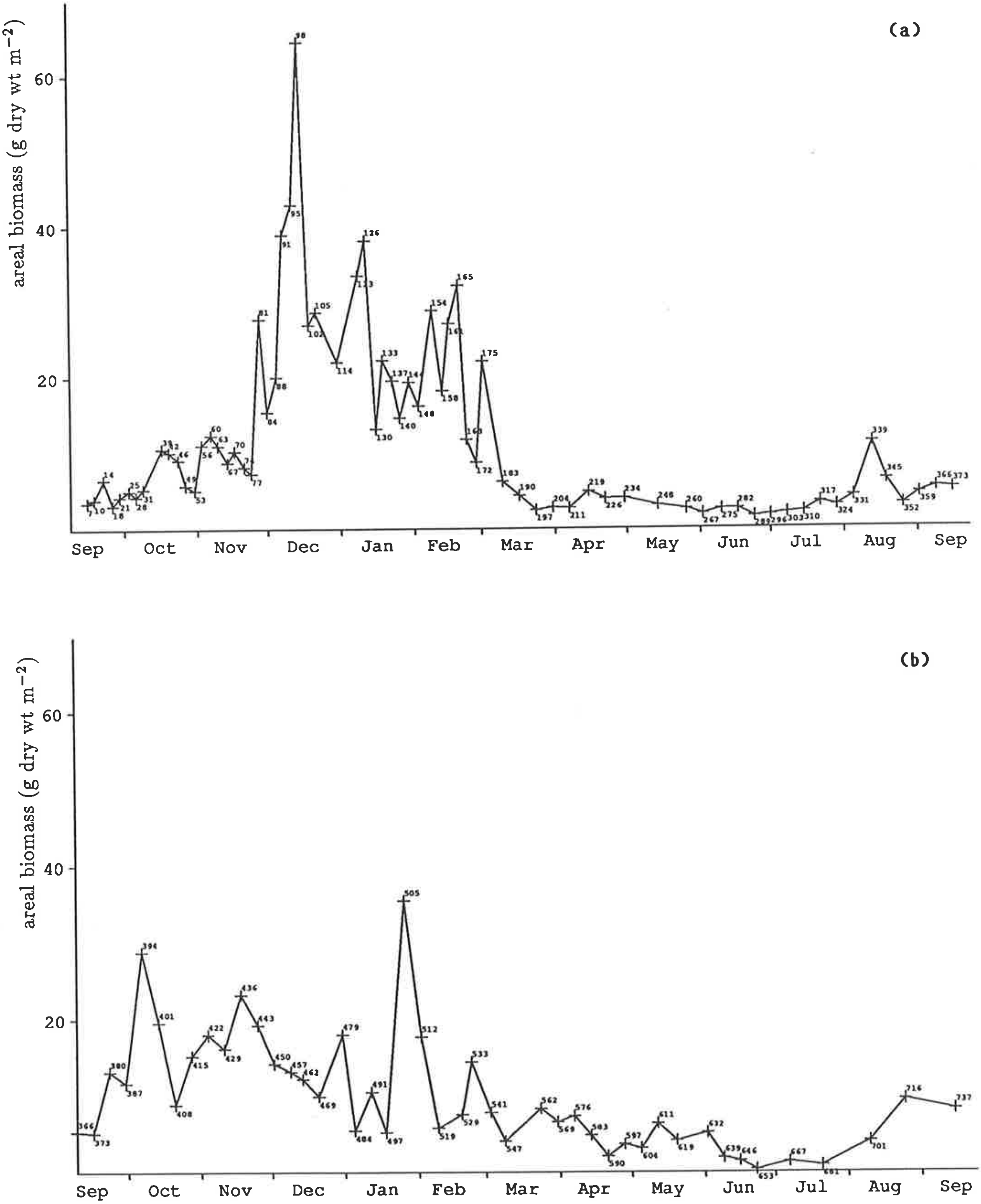


Figure 3.43 Total zooplankton areal biomass (g dry wt m^{-2}) in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

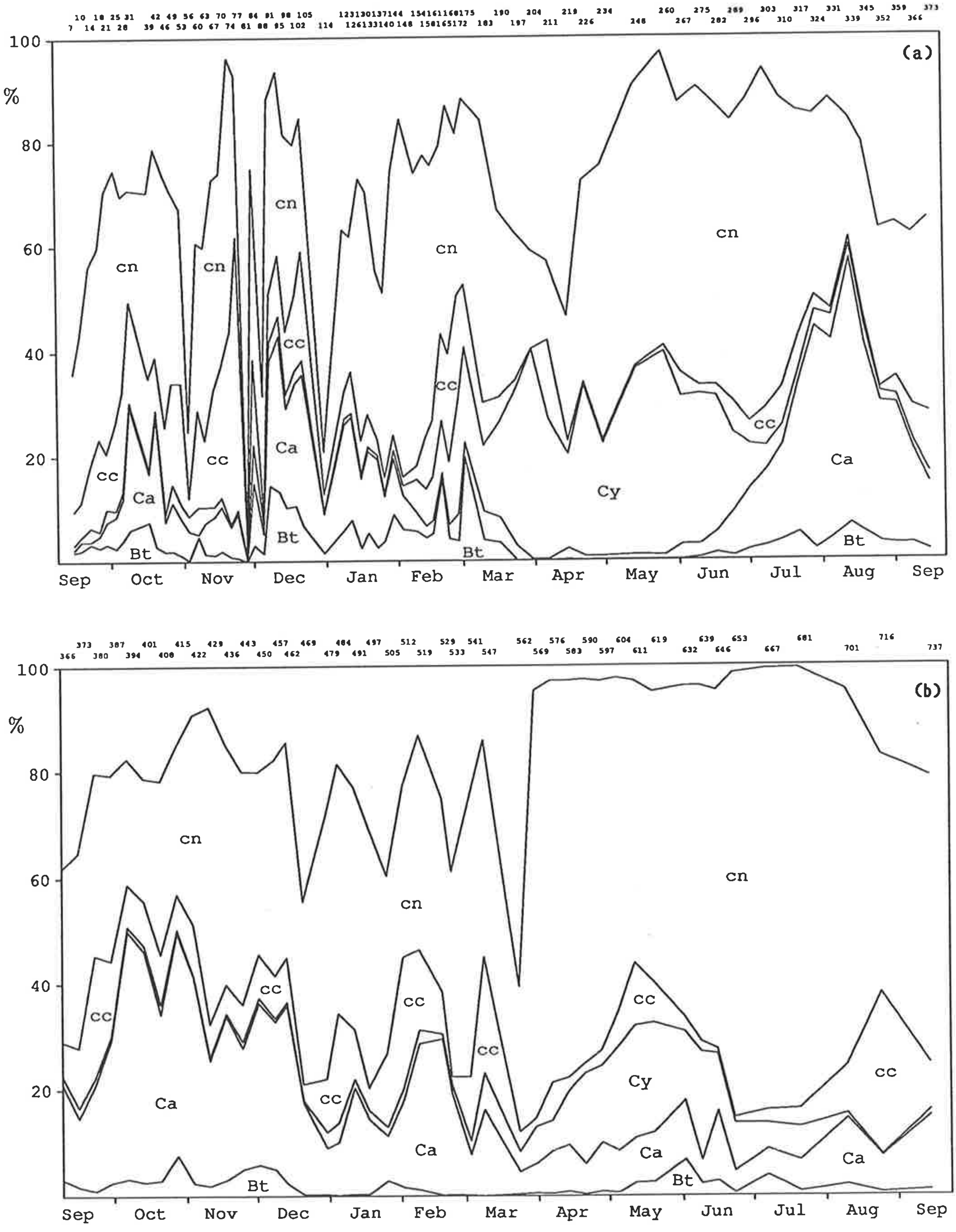


Figure 3.44.1 Percent composition of Mt Bold Reservoir zooplankton community based on density during (a) 1981/1982 and (b) 1982/1983. The contributions of the copepods; (bottom to top) *Boeckella triarticulata*, *Calamoecia ampulla*, cyclopoid copepod, calanoid copepodite, and copepod nauplii are shown. See Figure 3.40 for taxa codes.

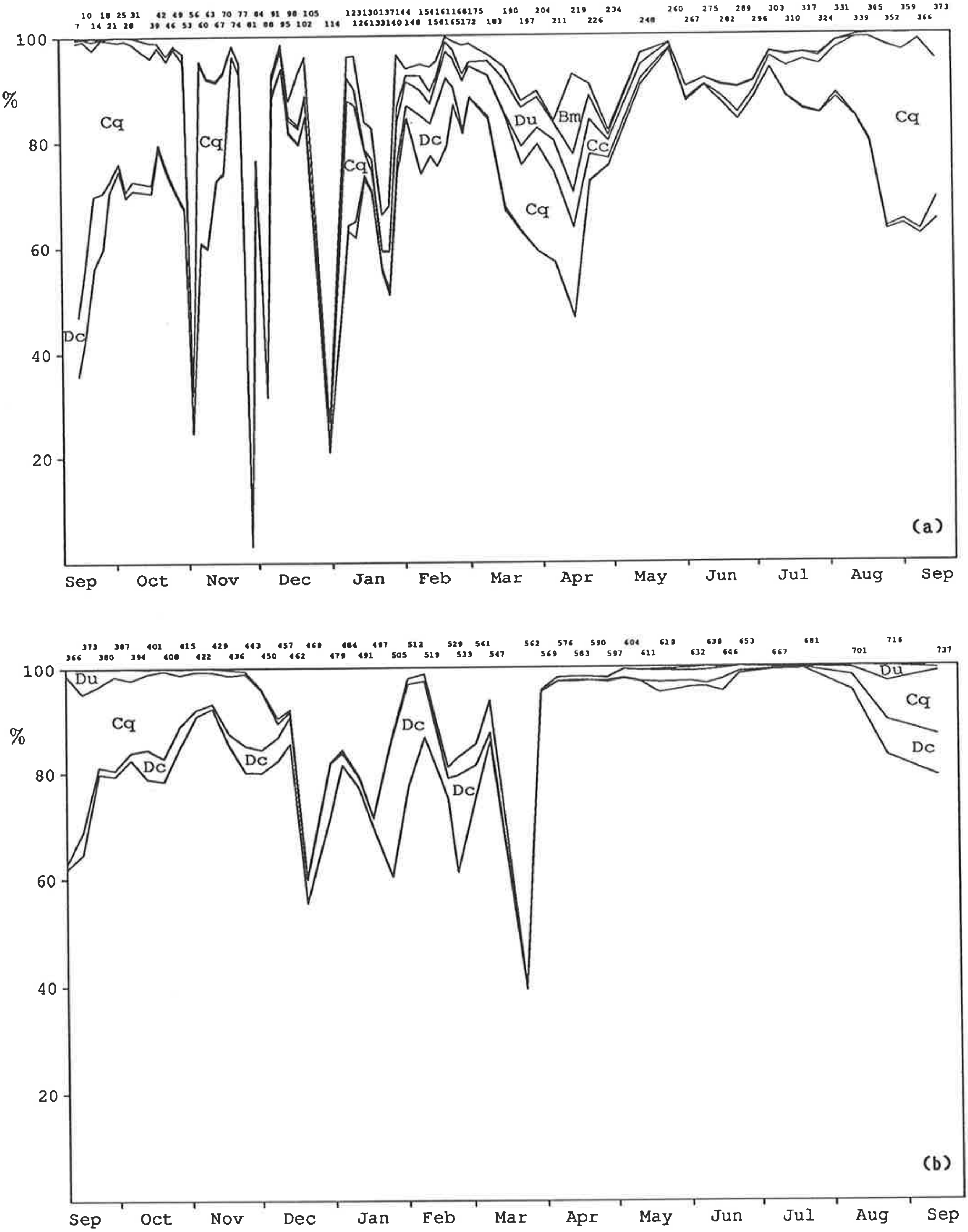


Figure 3.44.2 Percent composition of Mt Bold Reservoir zooplankton community based on density during (a) 1981/1982 and (b) 1982/1983. The contributions of the cladocerans; (bottom to top) *Daphnia carinata, Ceriodaphnia quadrangula, Ceriodaphnia cornuta, Diaphanosoma unguiculatum,* and *Bosmina meridionalis* are shown. See Figure 3.40 for taxa codes.

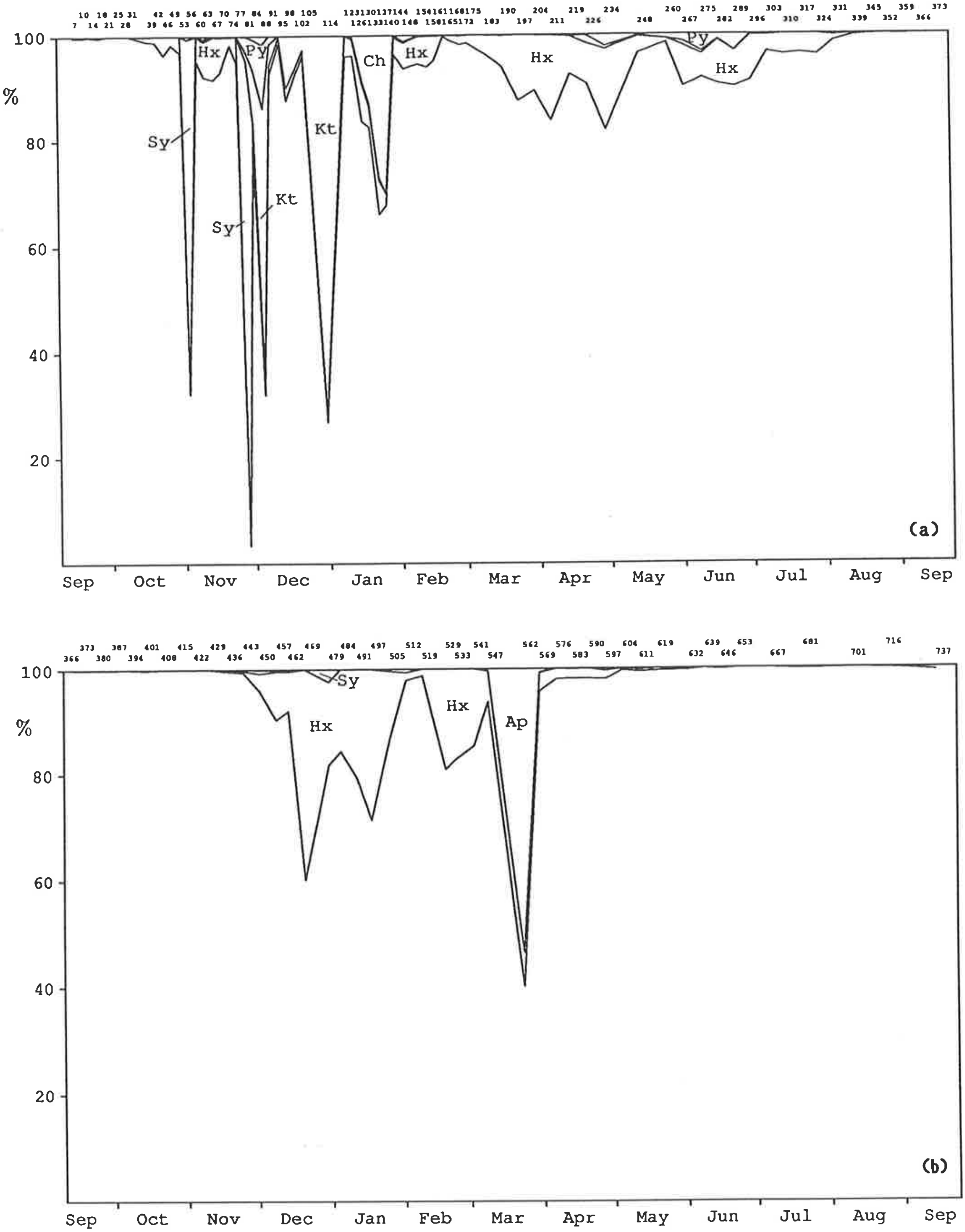
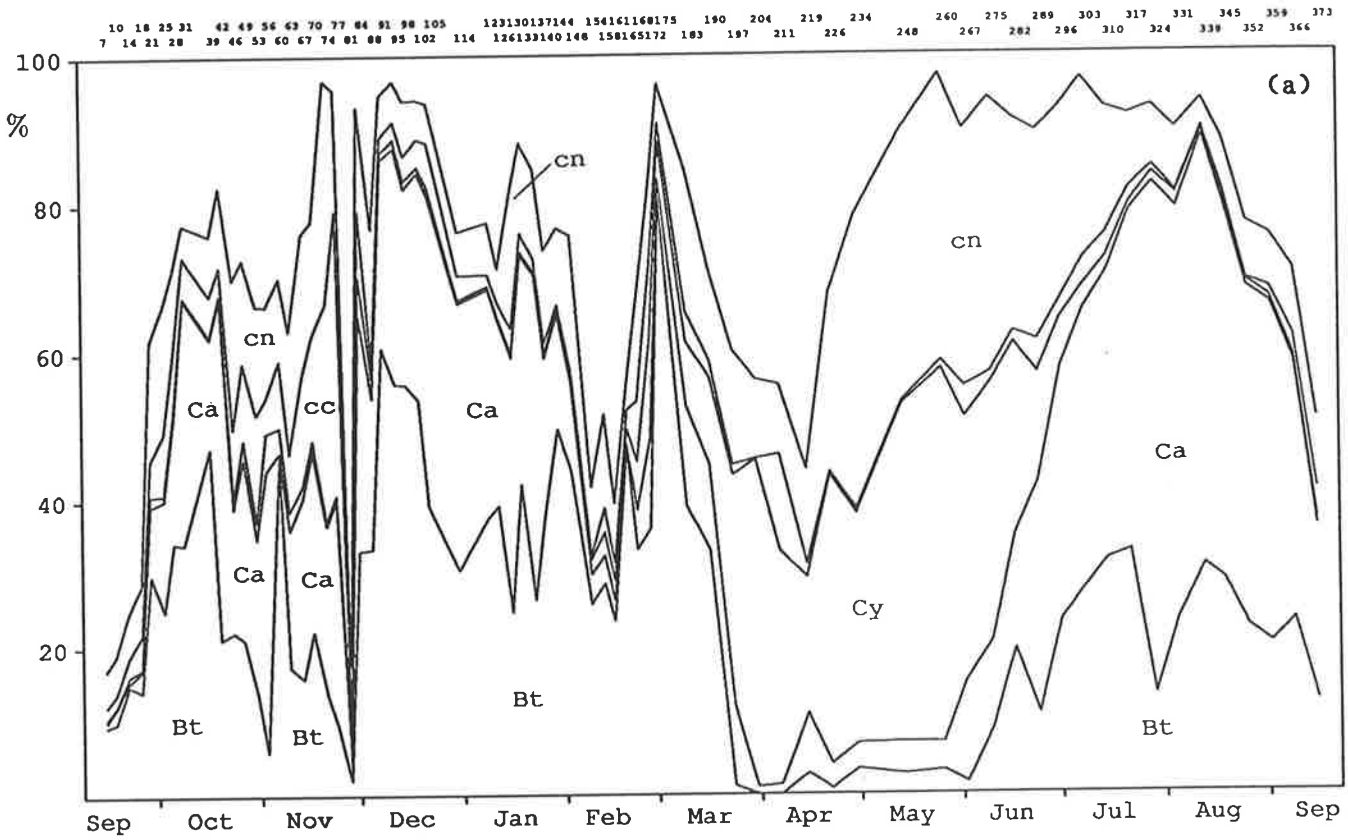


Figure 3.44.3 Percent composition of Mt Bold Reservoir zooplankton community based on density during (a) 1981/1982 and (b) 1982/1983. The contributions of the rotifers; (bottom to top) *Hexarthra* sp., *Syncheata* spp., *Keratella* spp., *Polyarthra* spp., *Conochilus* sp., and *Asplanchna* spp. are shown. See Figure 3.40 for taxa codes.



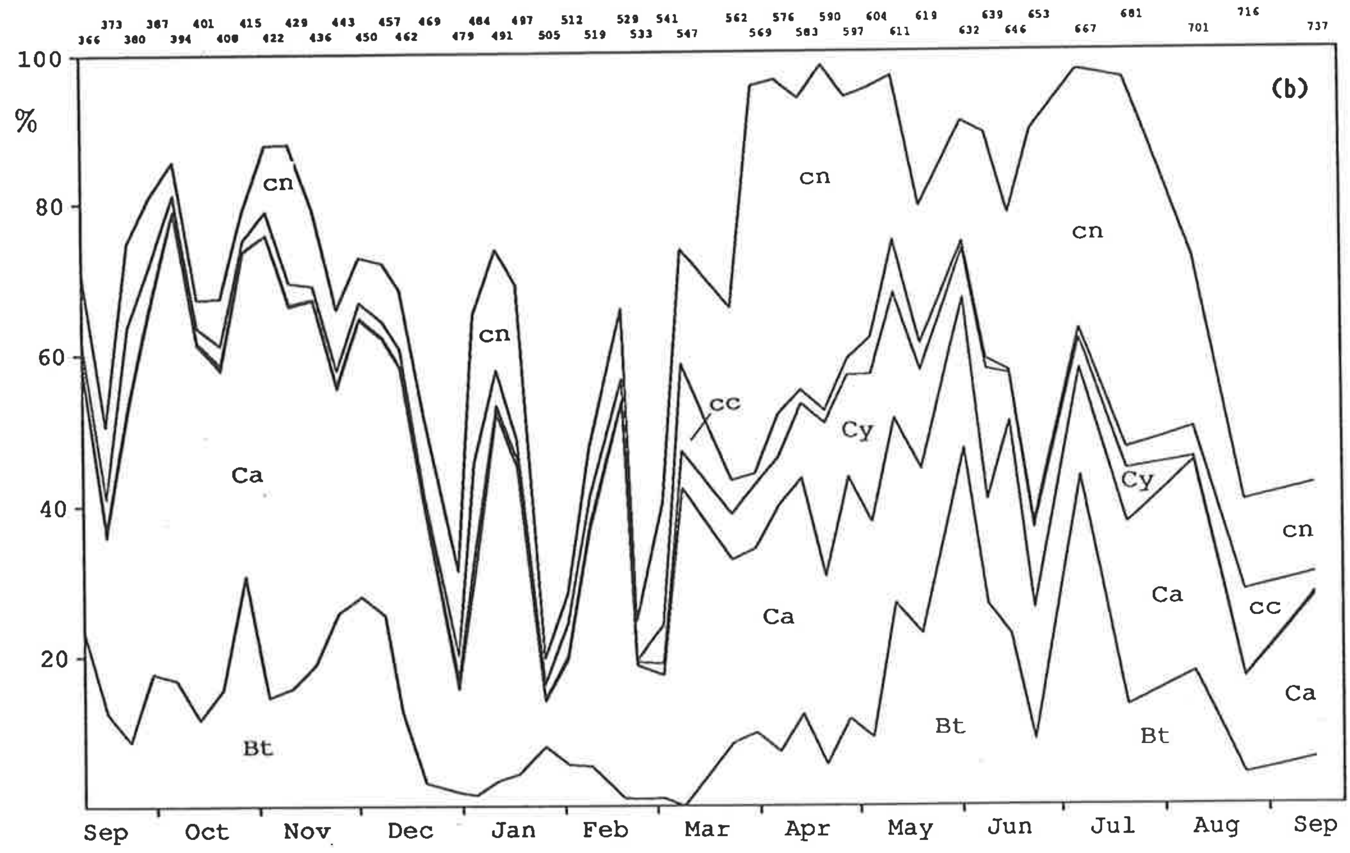
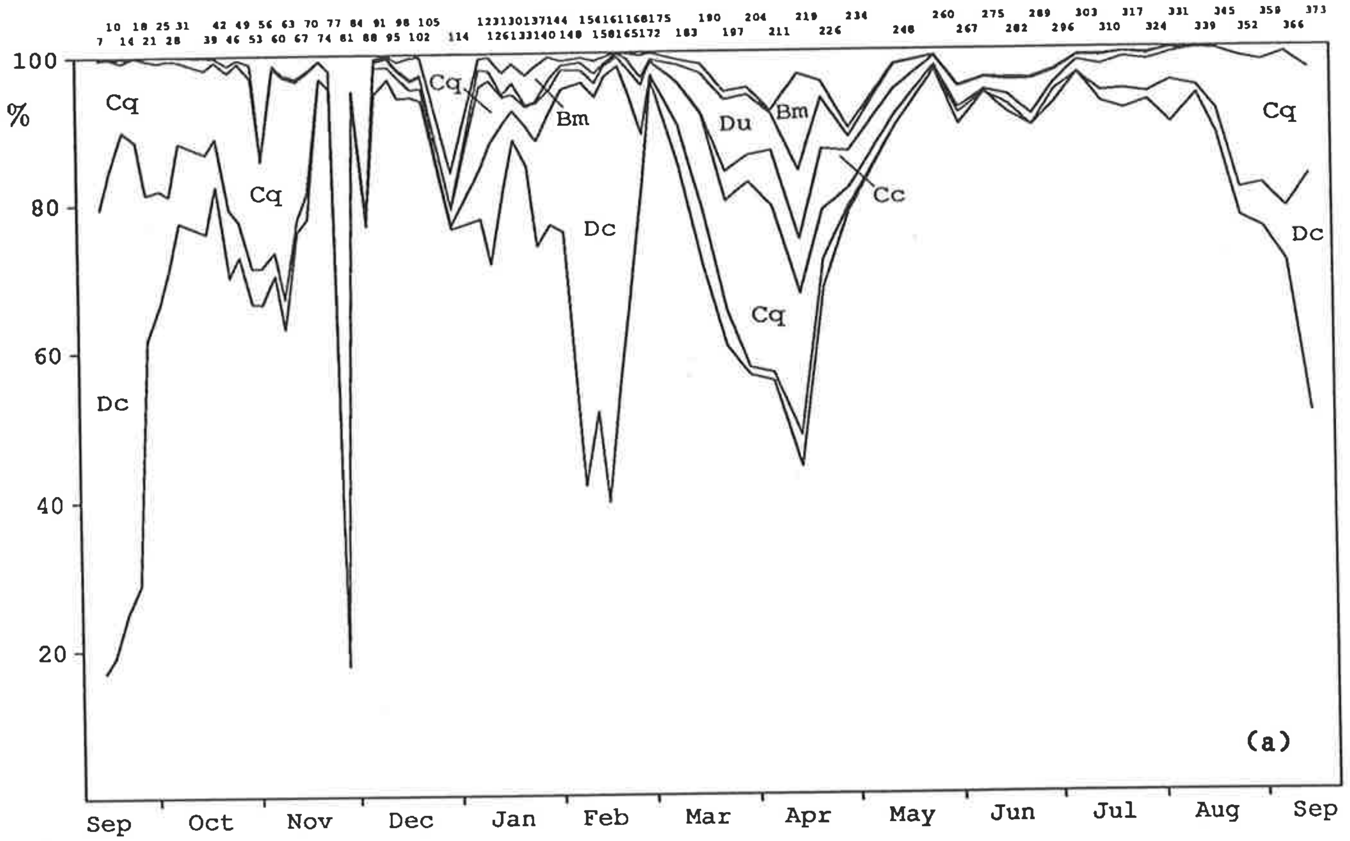


Figure 3.45.1 Percent composition of Mt Bold Reservoir zooplankton community based on biomass during (a) 1981/1982 and (b) 1982/1983. The contributions of the copepods; (bottom to top) *Boeckella triarticulata, Calamoecia ampulla,* cyclopoid copepod, calanoid copepodite, and copepod nauplii are shown. See Figure 3.40 for taxa codes.



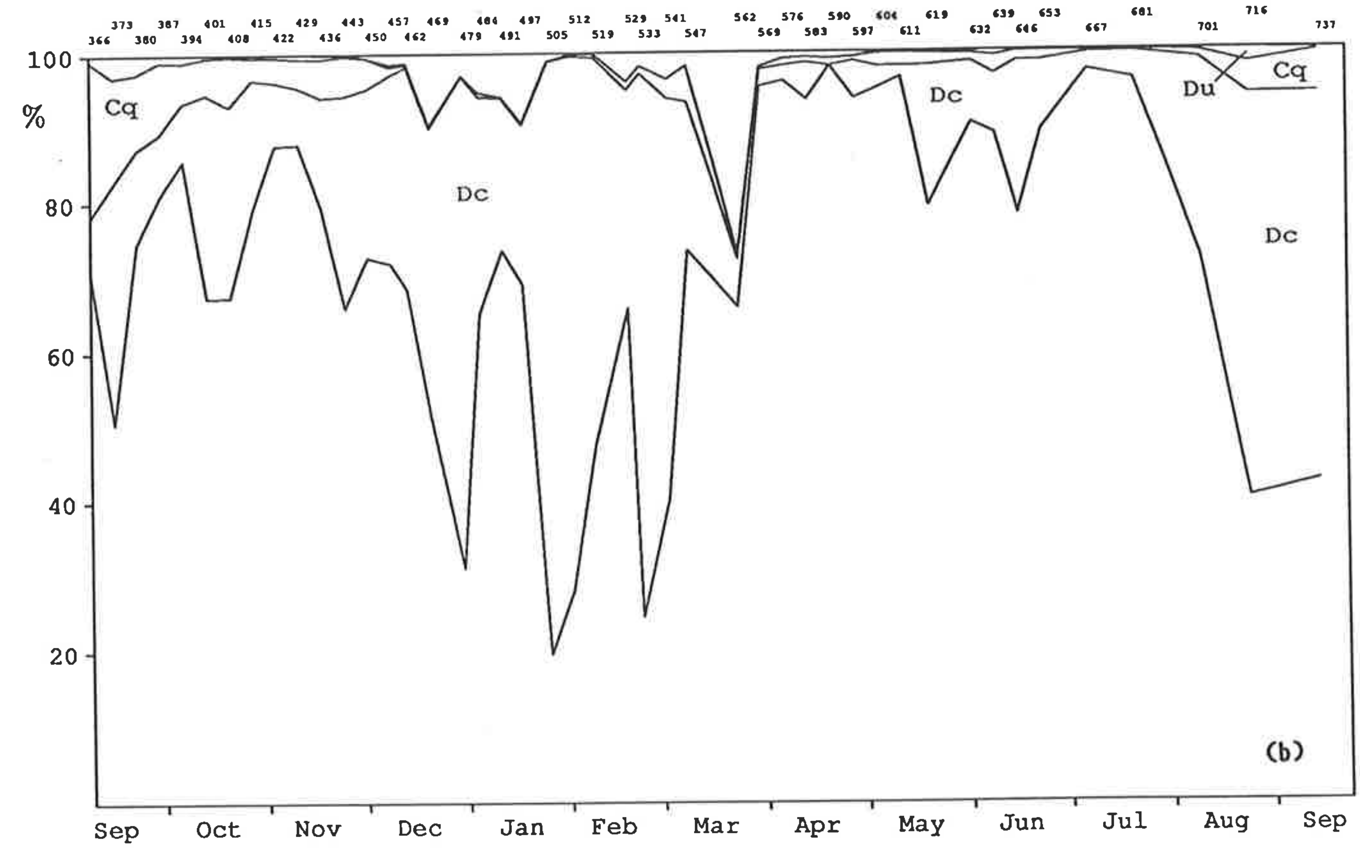
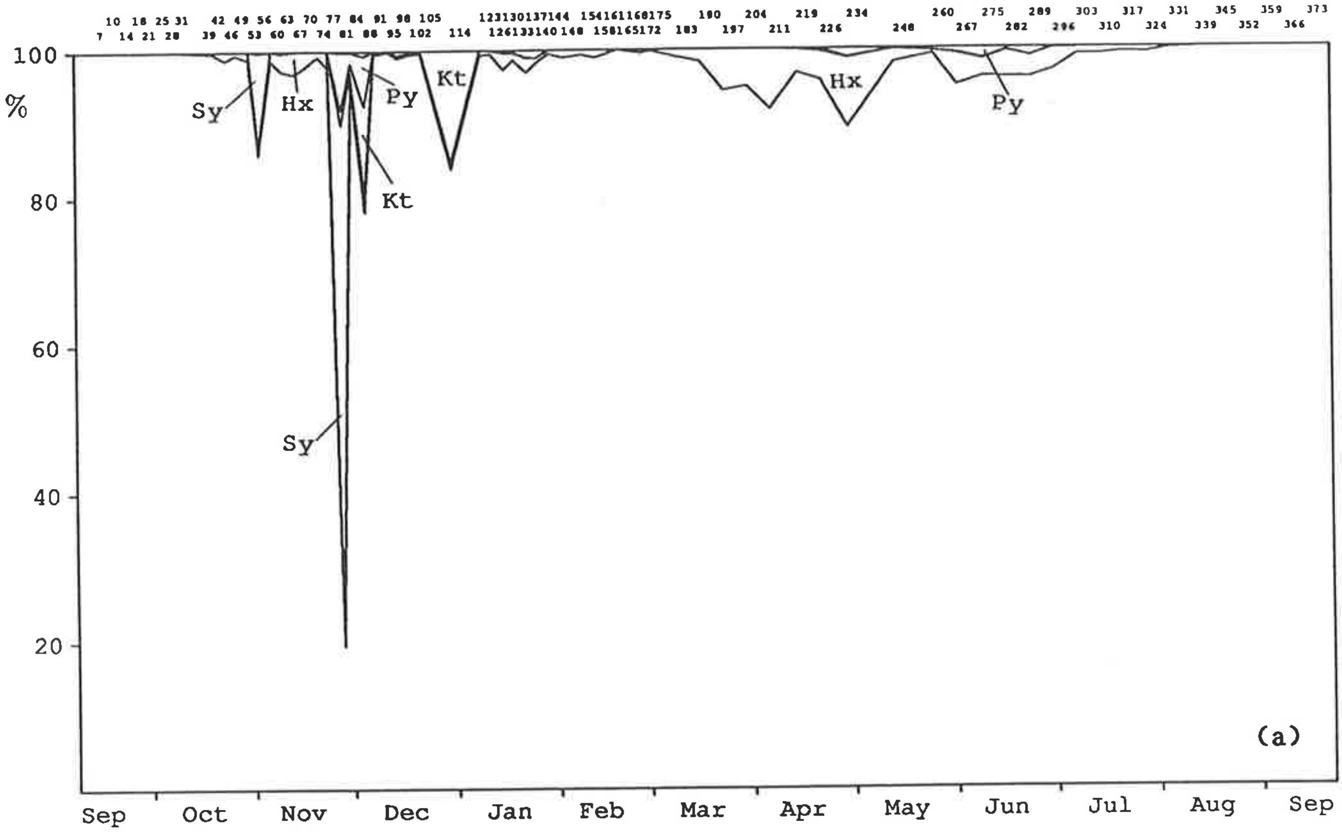


Figure 3.45.2 Percent composition of Mt Bold Reservoir zooplankton community based on biomass during (a) 1981/1982 and (b) 1982/1983. The contributions of the cladocerans; (bottom to top) *Daphnia carinata, Ceriodaphnia quadrangula, Ceriodaphnia cornuta, Diaphanosoma unguiculatum,* and *Bosmina meridionalis* are shown. See Figure 3.40 for taxa codes.



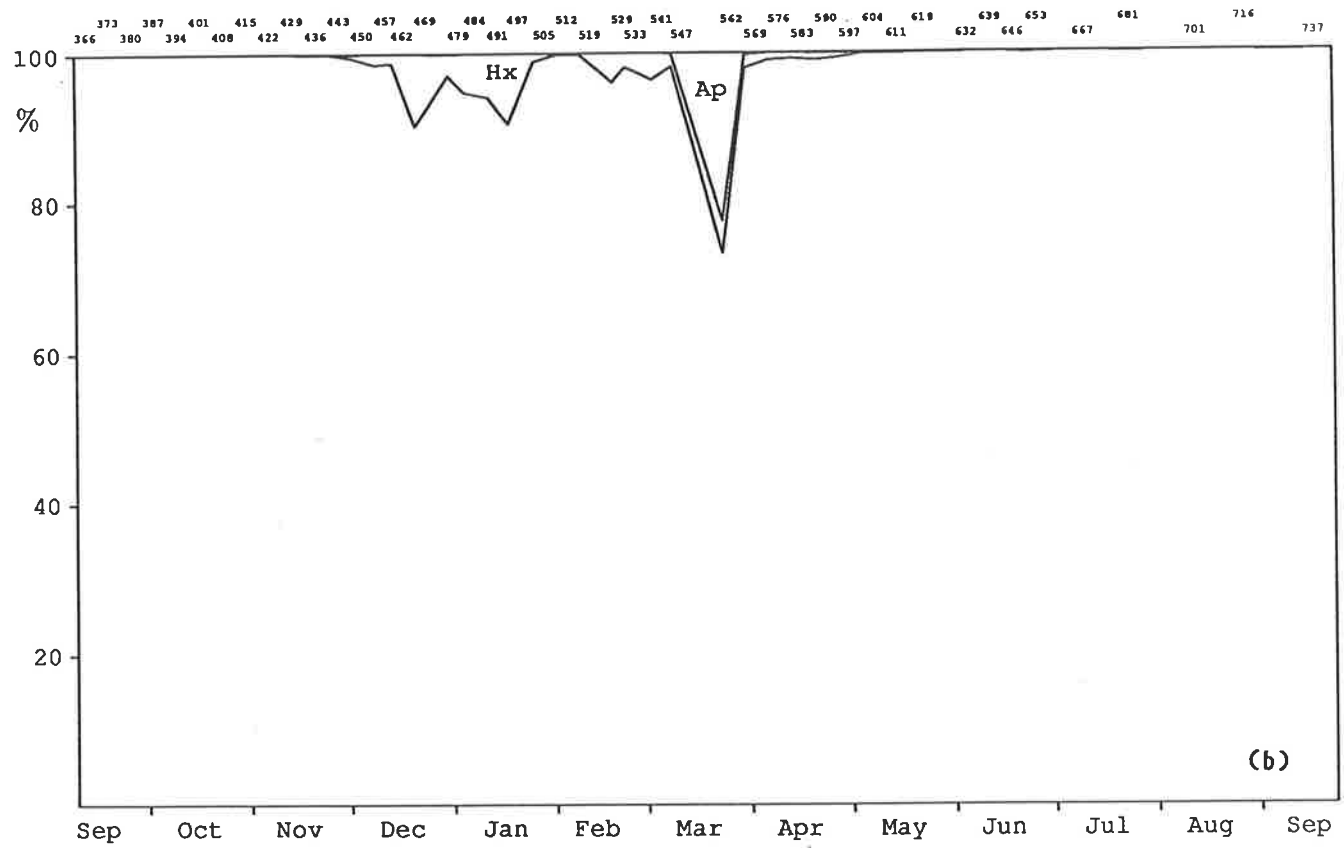


Figure 3.45.3 Percent composition of Mt Bold Reservoir zooplankton community based on biomass during (a) 1981/1982 and (b) 1982/1983. The contributions of the rotifers; (bottom to top) *Hexarthra* sp., *Syncheata* spp., *Keratella* spp., *Polyarthra* spp., *Conochilus* sp., and *Asplanchna* spp. are shown. See Figure 3.40 for taxa codes.

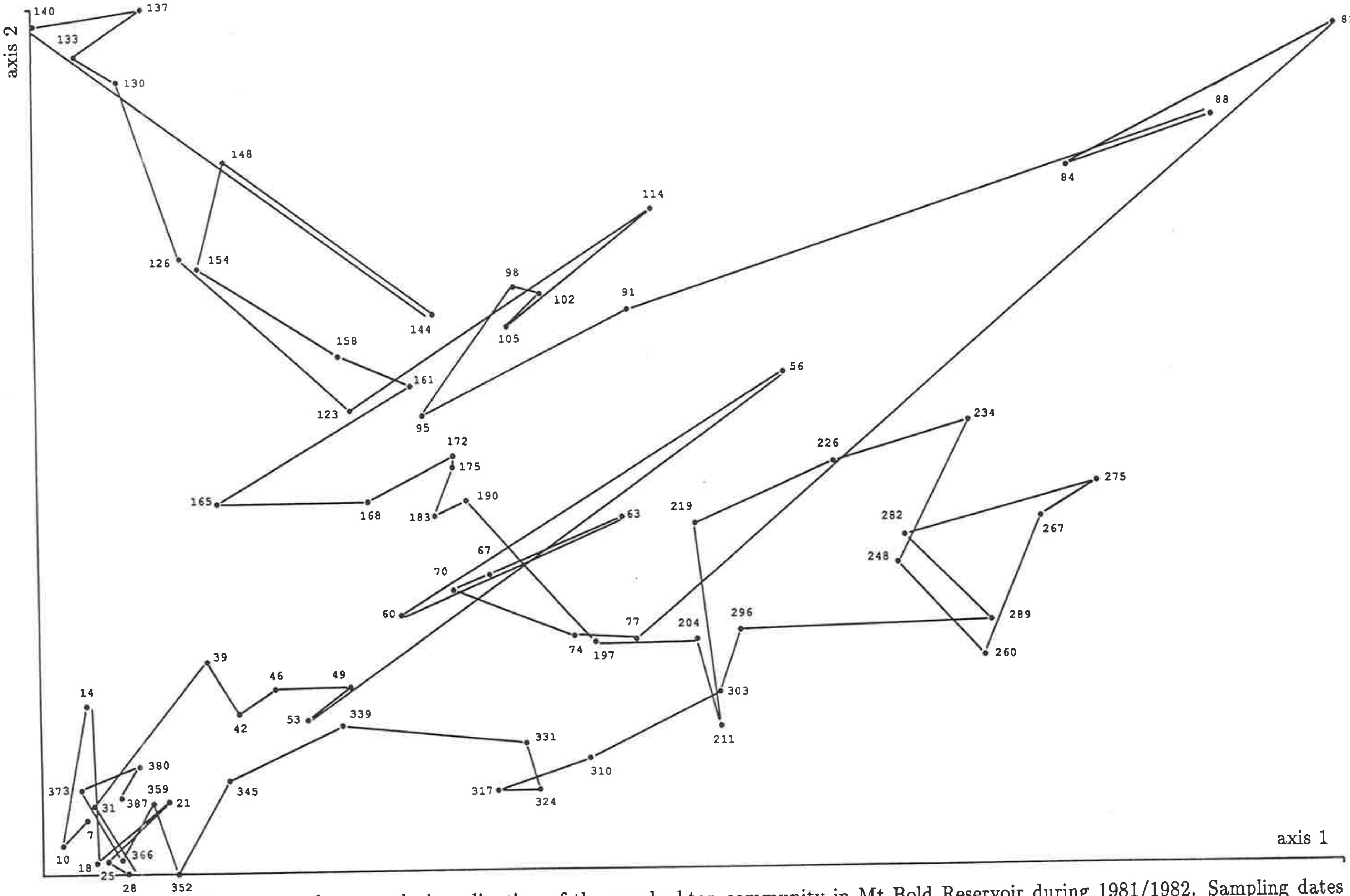


Figure 3.46a Detrended correspondence analysis ordination of the zooplankton community in Mt Bold Reservoir during 1981/1982. Sampling dates are numbered and joined sequentially from the start of sampling.

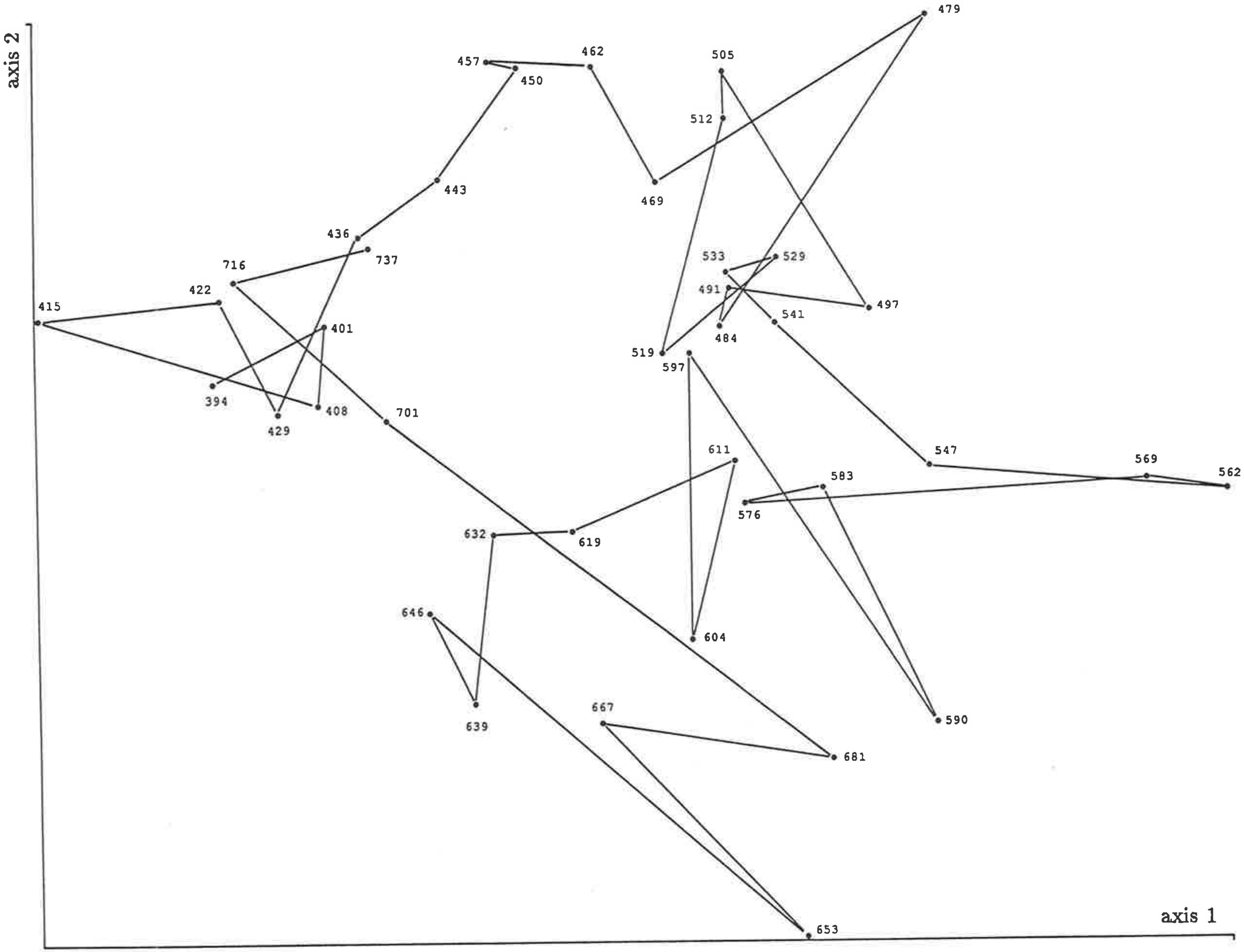


Figure 3.46b Detrended correspondence analysis ordination of the zooplankton community in Mt Bold Reservoir during 1982/1983. Sampling dates are numbered and joined sequentially from the start of sampling.

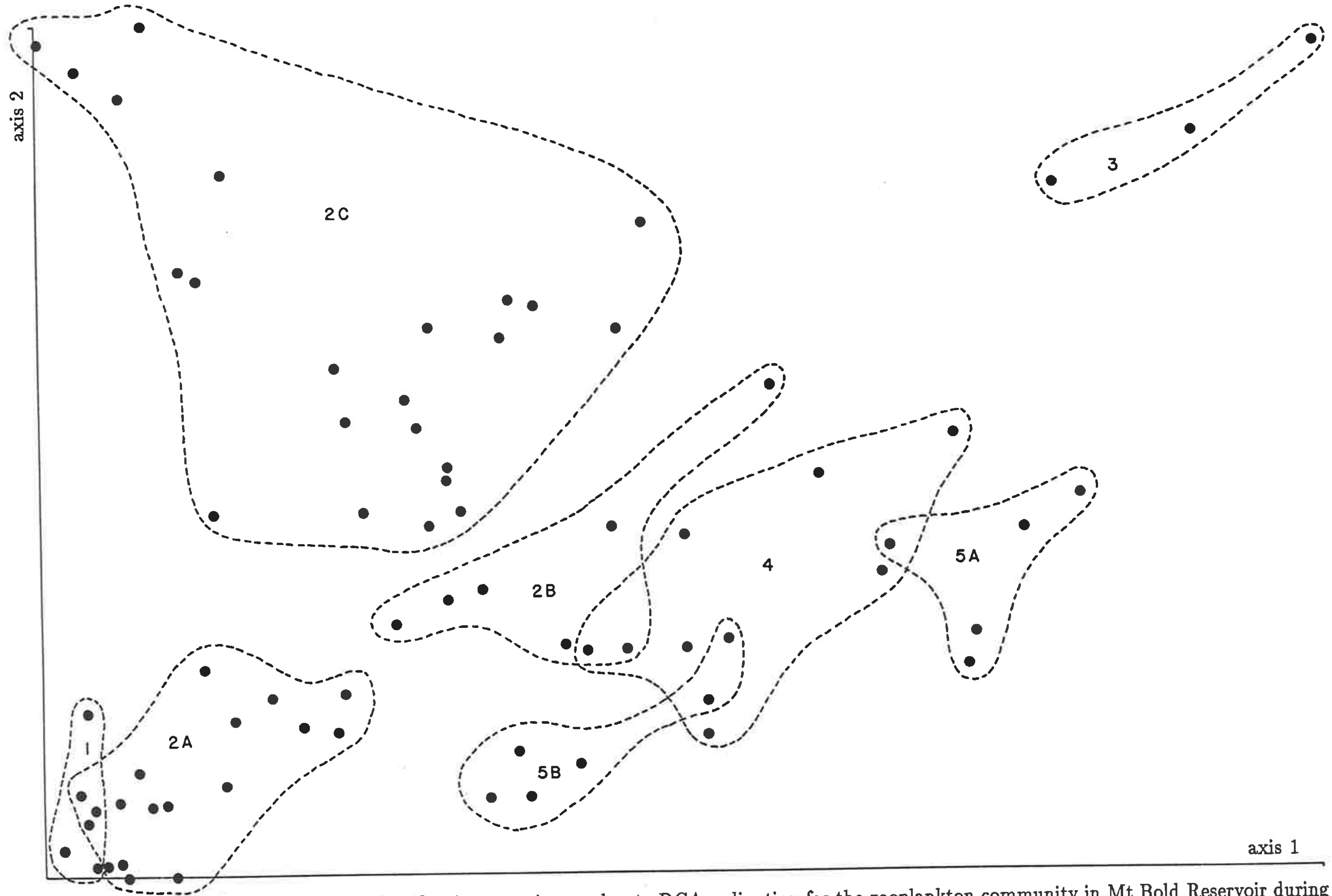


Figure 3.47a Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the zooplankton community in Mt Bold Reservoir during 1981/1982. See text for explanation of groups.

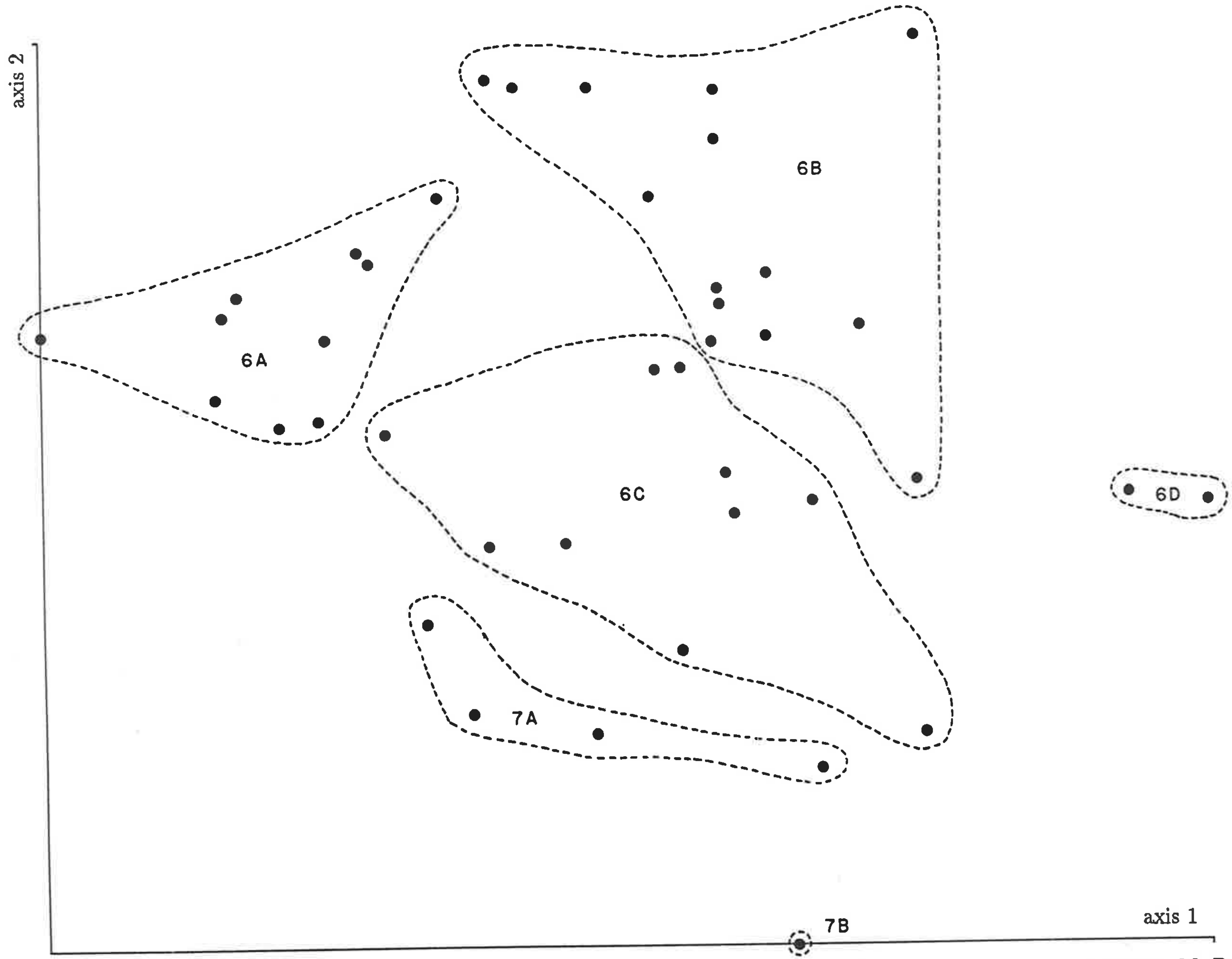


Figure 3.47b Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the zooplankton community in Mt Bold Reservoir during 1982/1983. See text for explanation of groups.

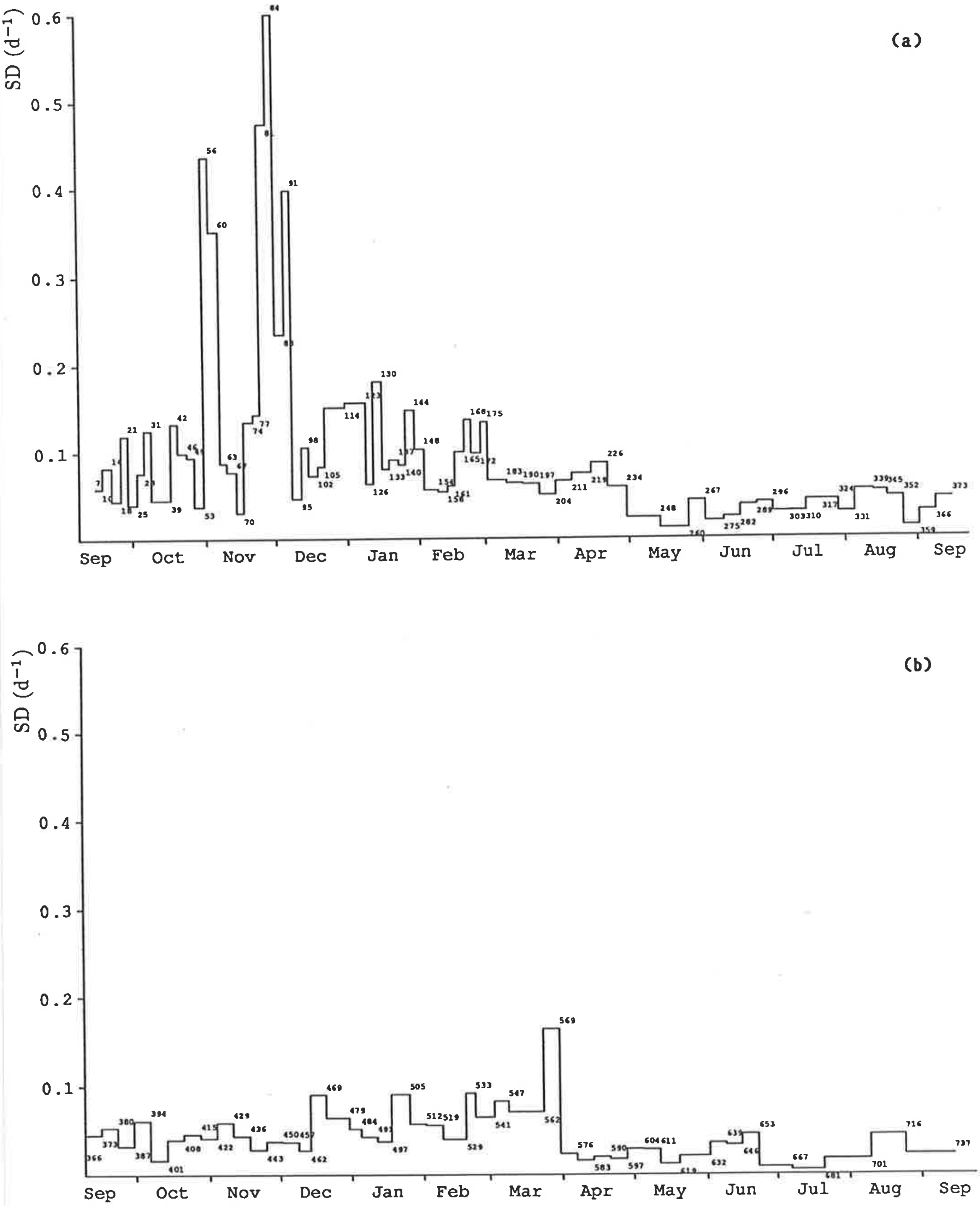


Figure 3.48 Summed difference index [SD] (d^{-1}) for the zooplankton community in Mt Bold Reservoir during (a) 1981/1982 and (b) 1982/1983.

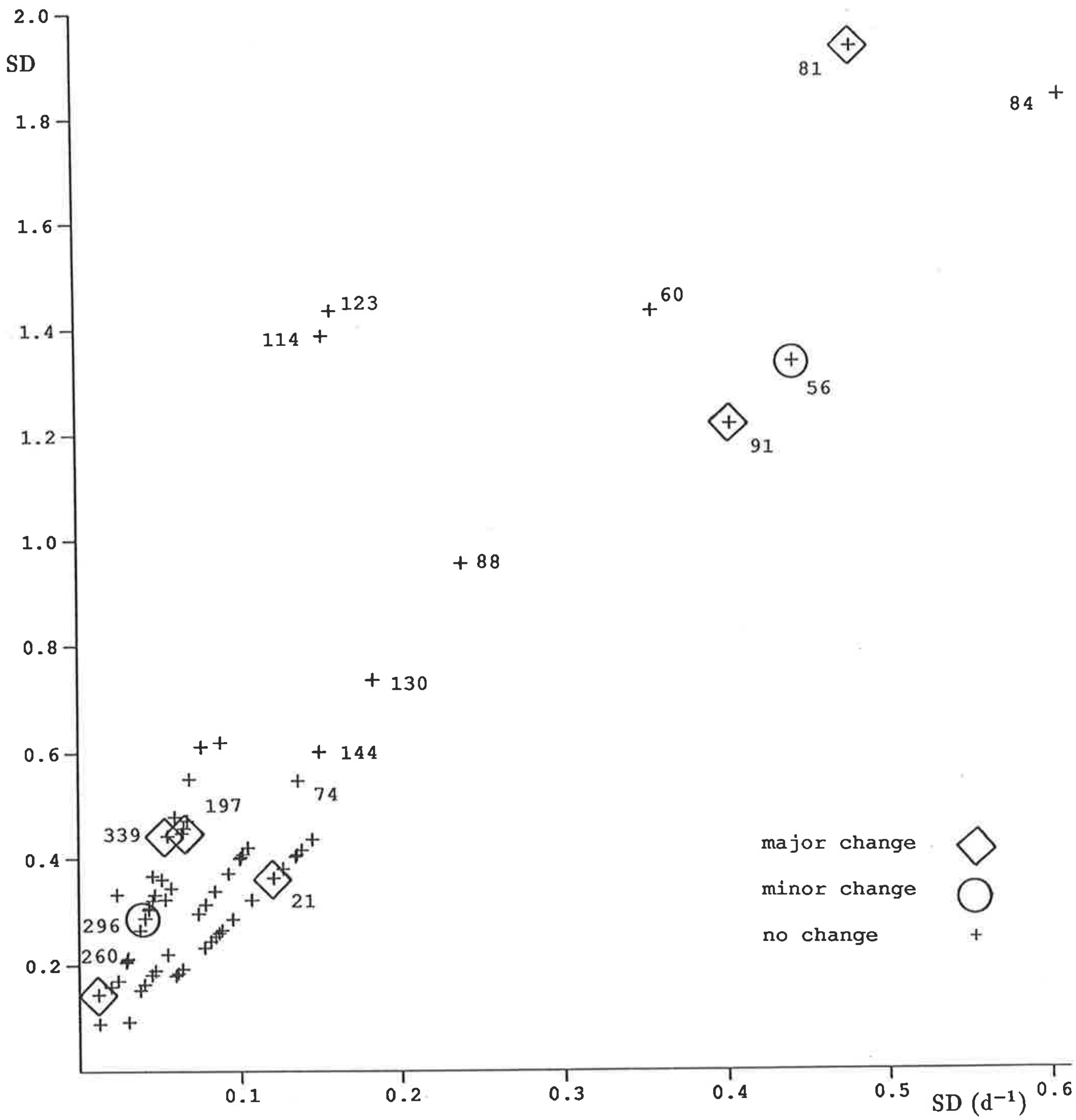


Figure 3.49a Position of each sampling interval with respect to the SD rate (X axis) and the SD absolute change (Y axis) during 1981/1982. Symbols indicate correspondence with MVA community changes.

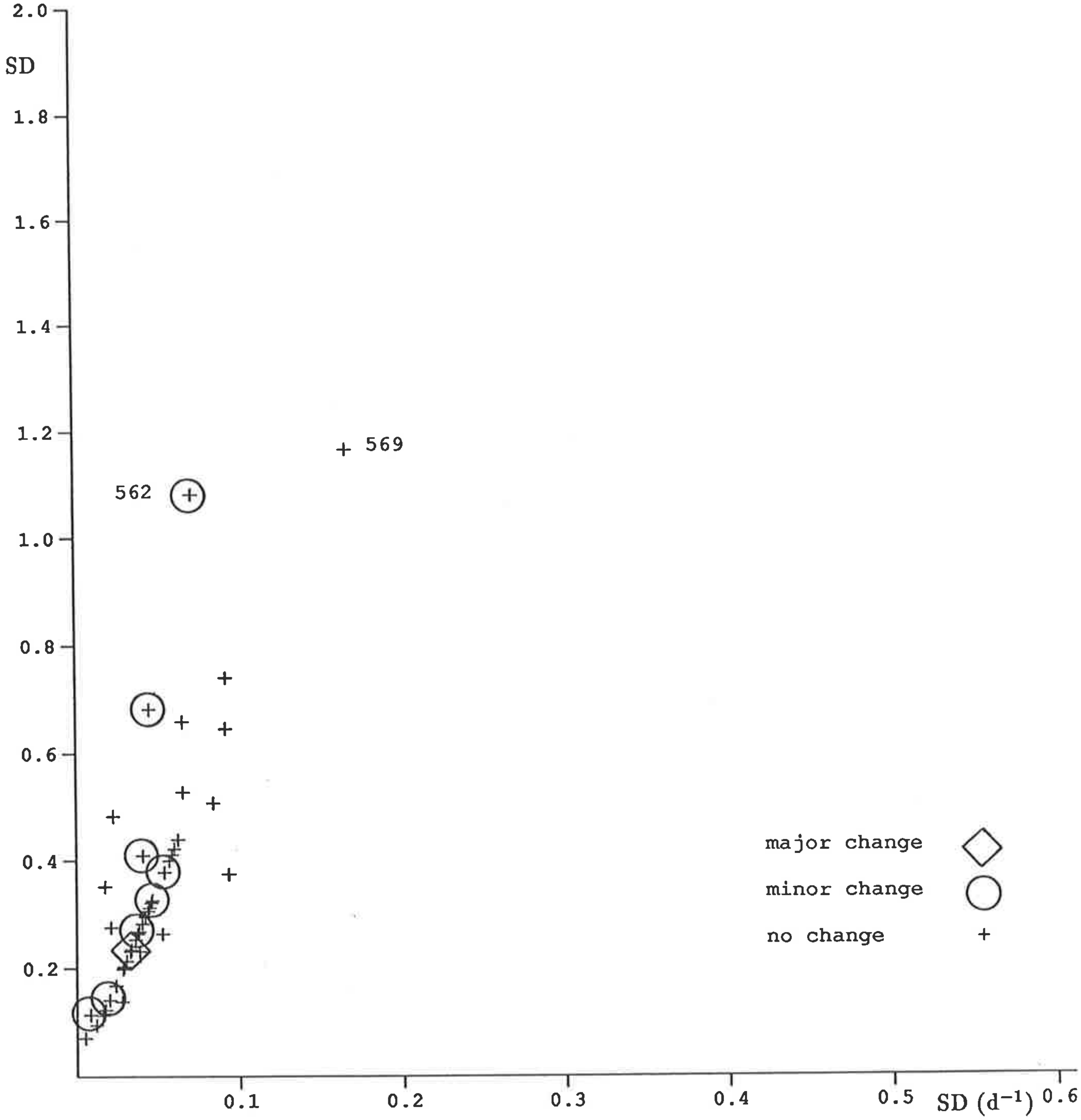


Figure 3.49b Position of each sampling interval with respect to the SD rate (X axis) and the SD absolute change (Y axis) during 1982/1983. Symbols indicate correspondence with MVA community changes.

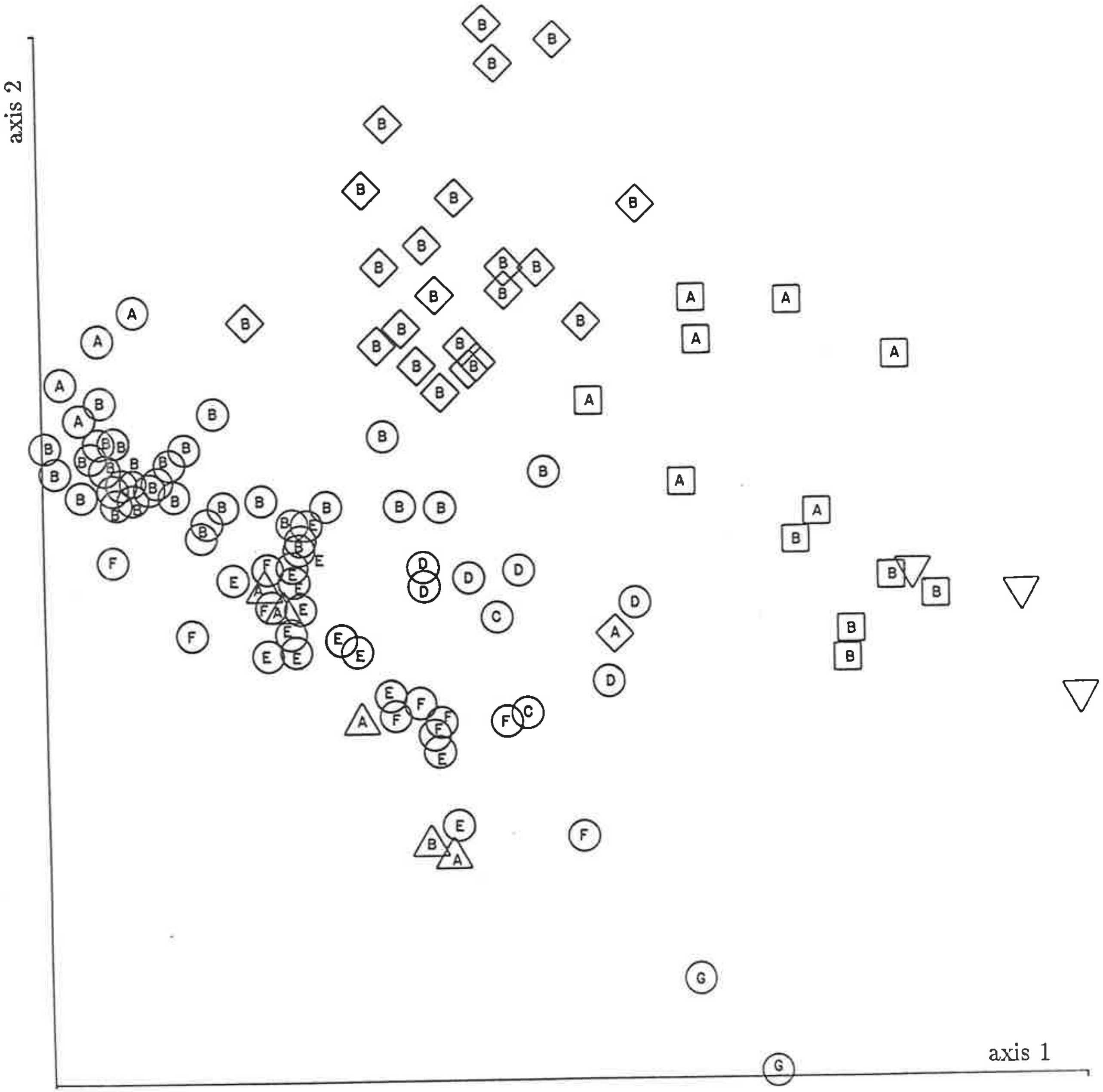


Figure 3.50 Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the zooplankton community in Mt Bold Reservoir during the whole study period. Symbols indicate major communities, letters within indicate minor communities.

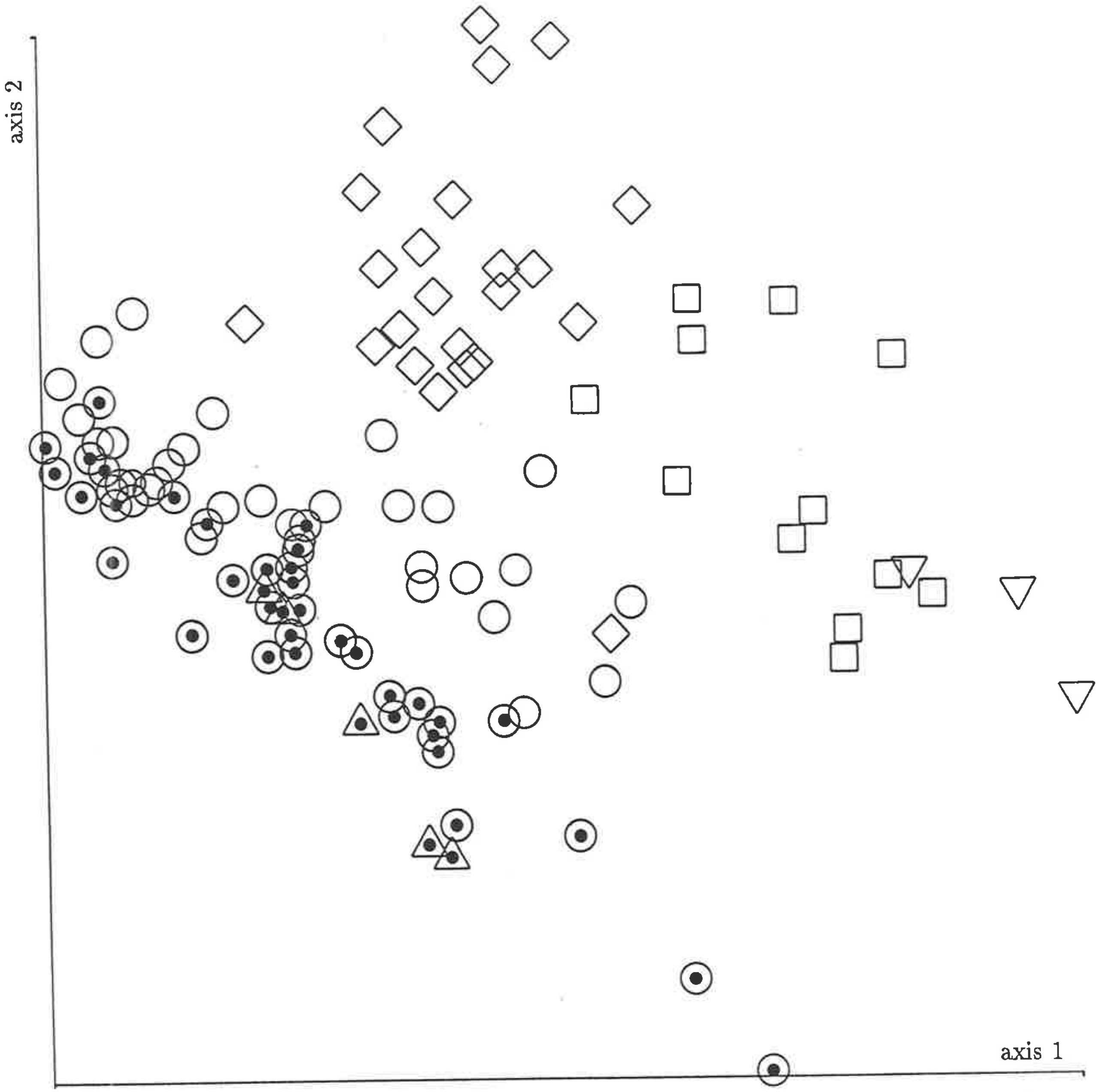


Figure 3.51 Bray-Curtis with UPGMA classification superimposed onto DCA ordination for the zooplankton community in Mt Bold Reservoir during the whole study period. Open symbols indicate 1981/1982 sample dates, dotted symbols indicate 1982/1983 sample dates.

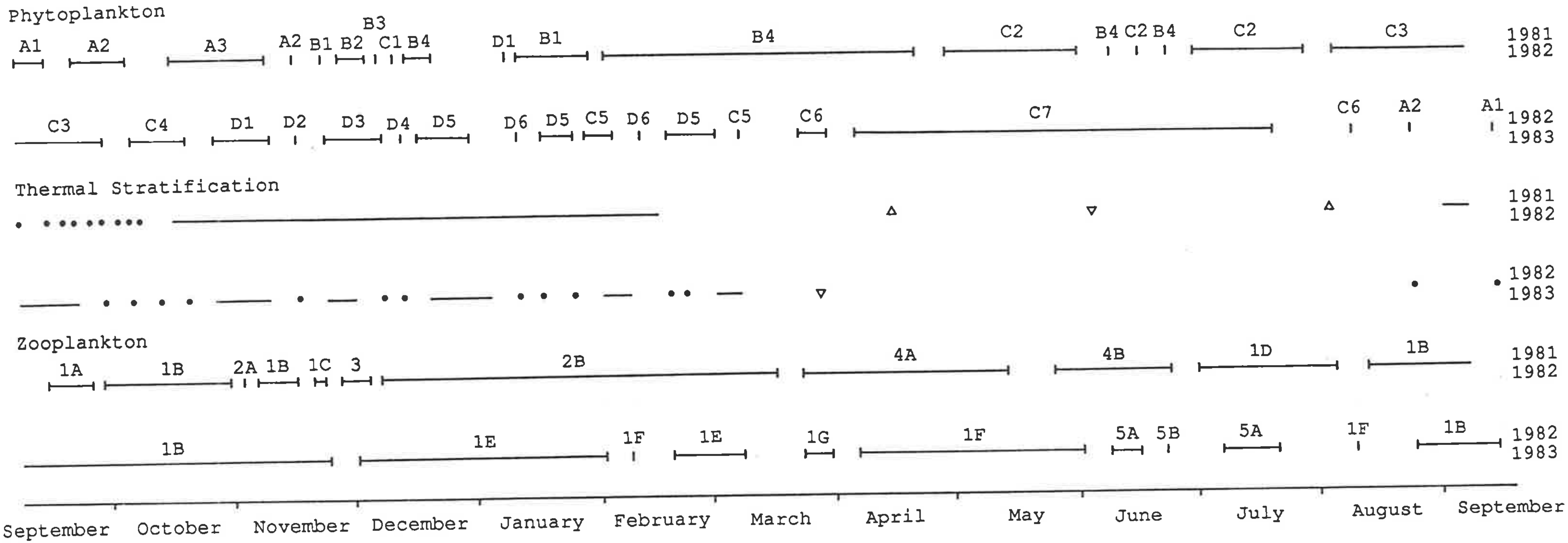


Figure 3.52 Temporal sequences of phytoplankton communities [upper], thermal stratification [middle], and zooplankton communities [lower] in Mt Bold Reservoir during the study period. A solid line represents persistent stratification and dots represent intermittent stratification. Pumping start (△) and stop (▽).

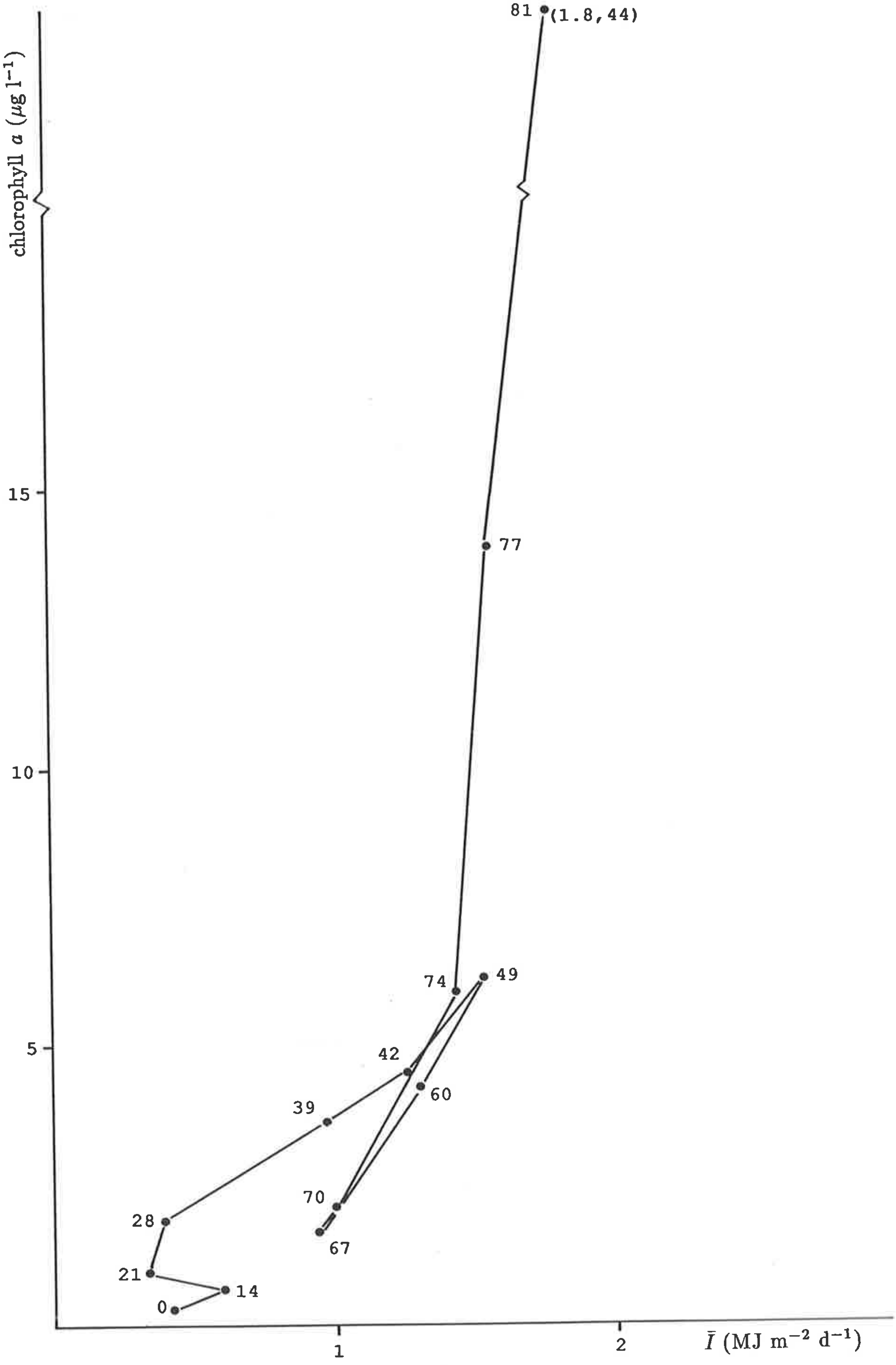


Figure 3.53a Relationship between the average irradiance within the mixed zone [$\bar{I}$] (MJ m^{-2} d^{-1}) and chlorophyll a concentration (μg l^{-1}) during the 1981/1982 spring growth period in Mt Bold Reservoir.

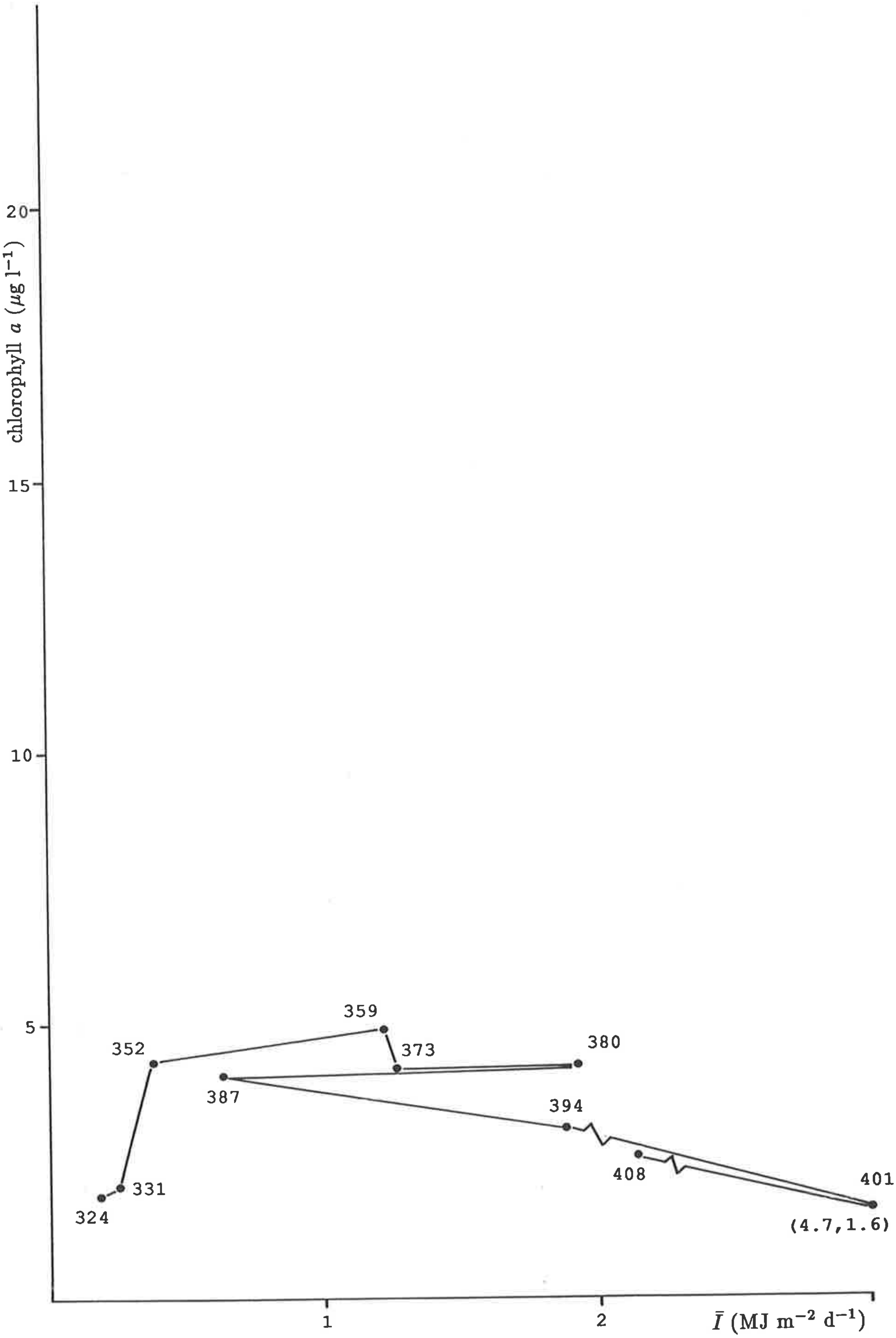


Figure 3.53b Relationship between the average irradiance within the mixed zone [$\bar{I}$] (MJ m^{-2} d^{-1}) and chlorophyll a concentration (μg l^{-1}) during the 1982/1983 spring growth period in Mt Bold Reservoir.

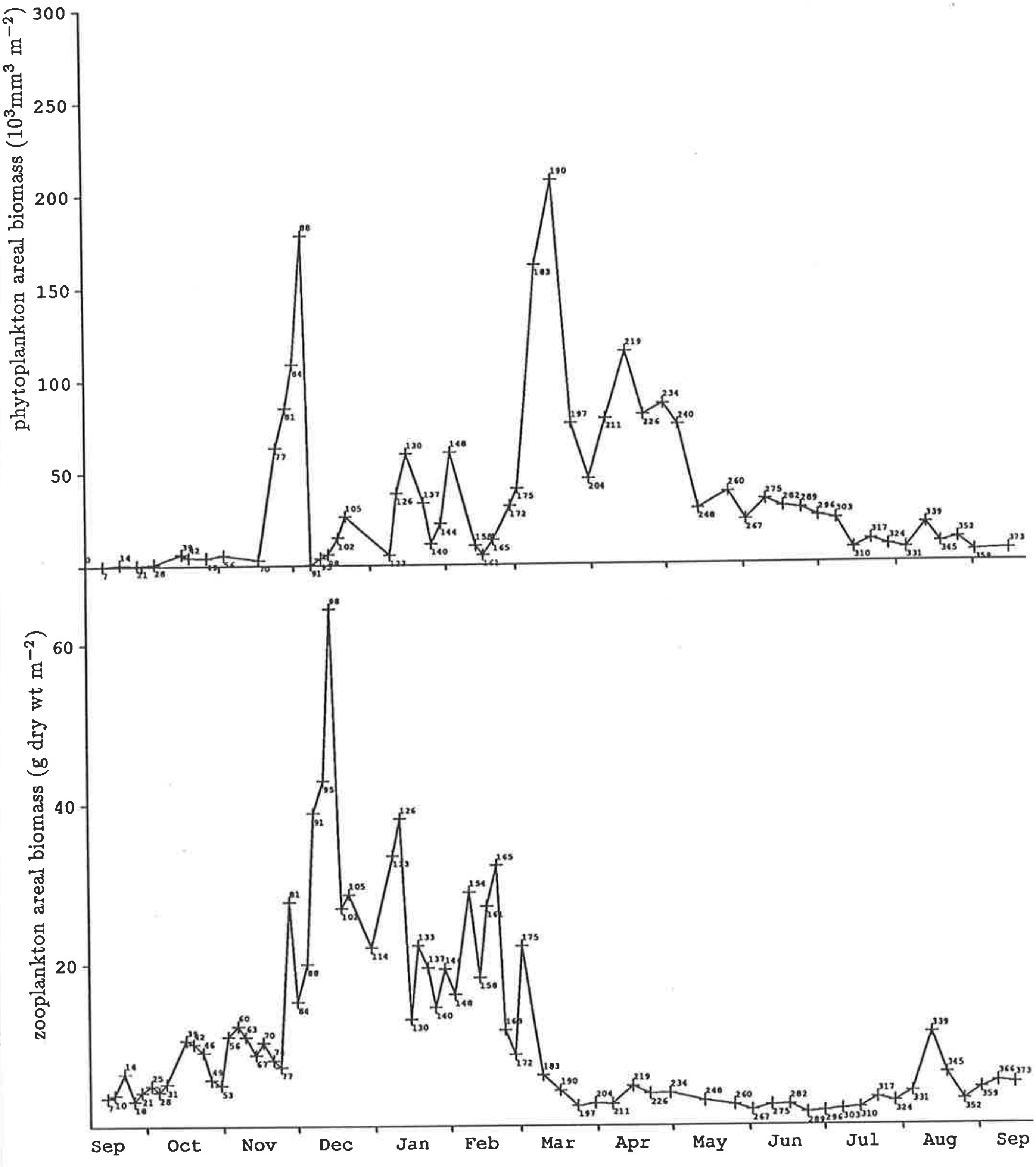


Figure 3.54a Phytoplankton areal biomass (mm^3 m^{-2}) [upper] and zooplankton areal biomass (g dry wt m^{-2}) [lower] in Mt Bold Reservoir during 1981/1982.

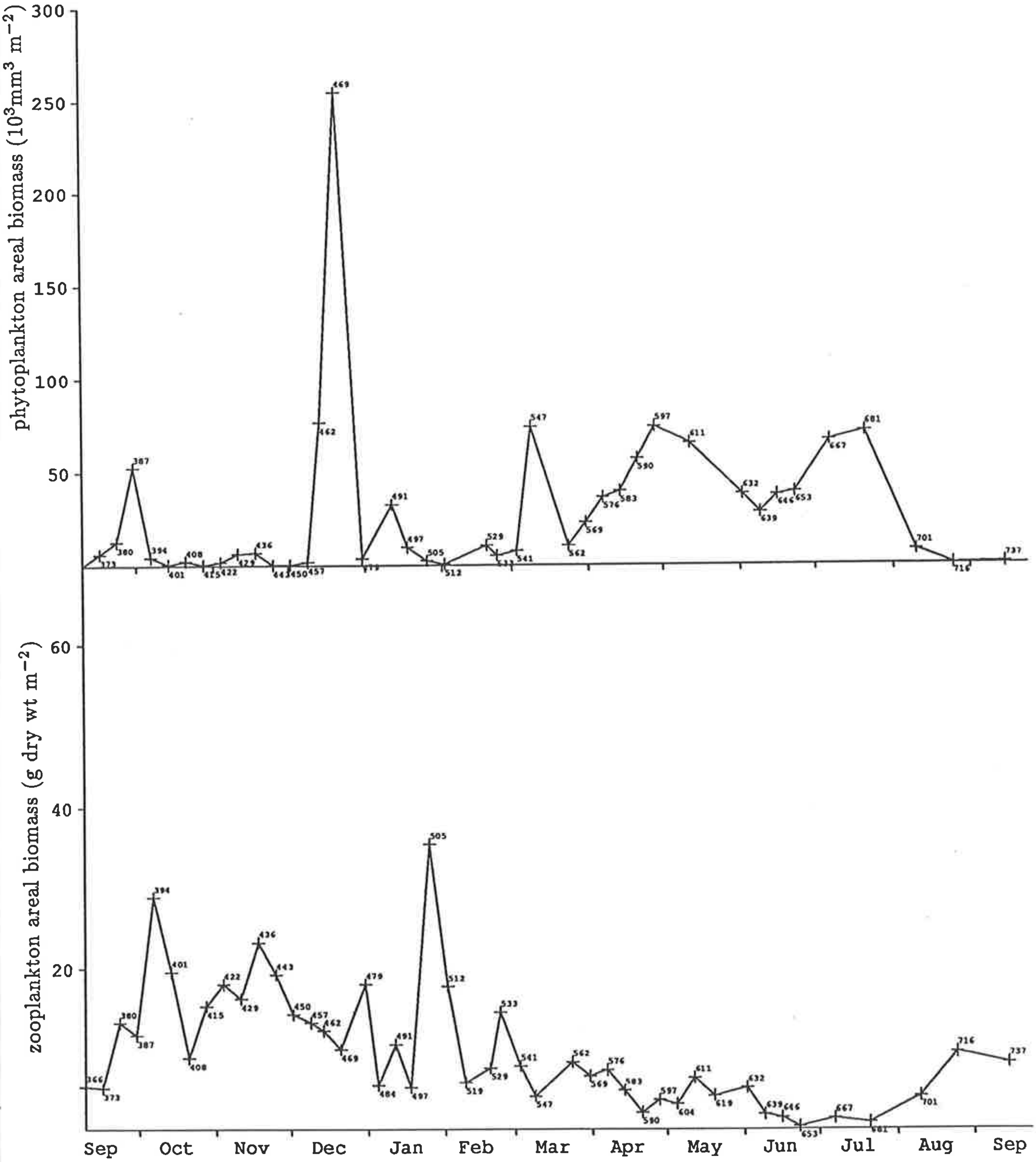


Figure 3.54b Phytoplankton areal biomass (mm^3 m^{-2}) [upper] and zooplankton areal biomass (g dry wt m^{-2}) [lower] in Mt Bold Reservoir during 1982/1983.

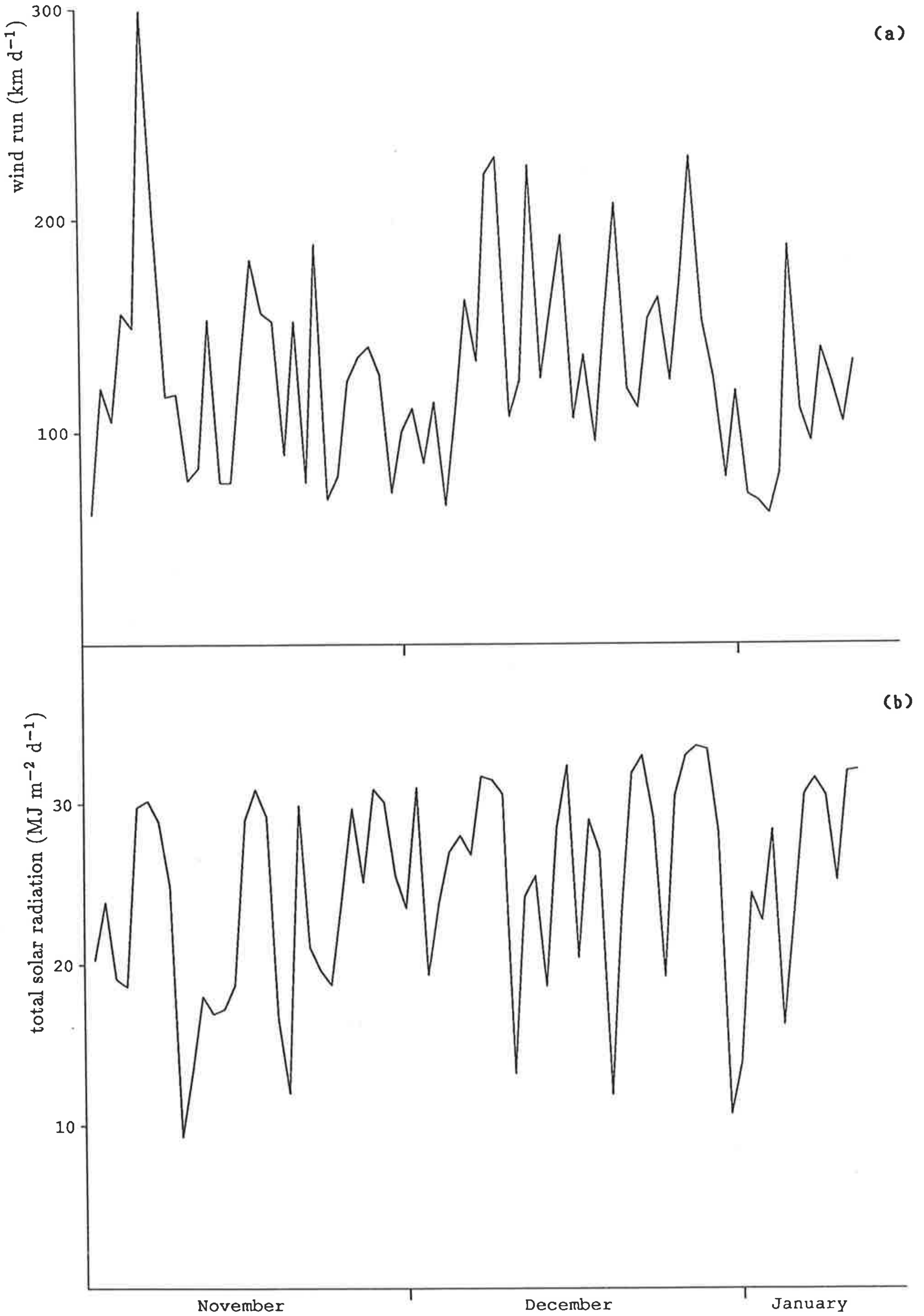


Figure 4.1 (a) Daily wind run (km d^{-1}) and (b) daily total solar radiation (MJ m^{-2} d^{-1}) at Mt Bold Reservoir during the 1984/1985 study.

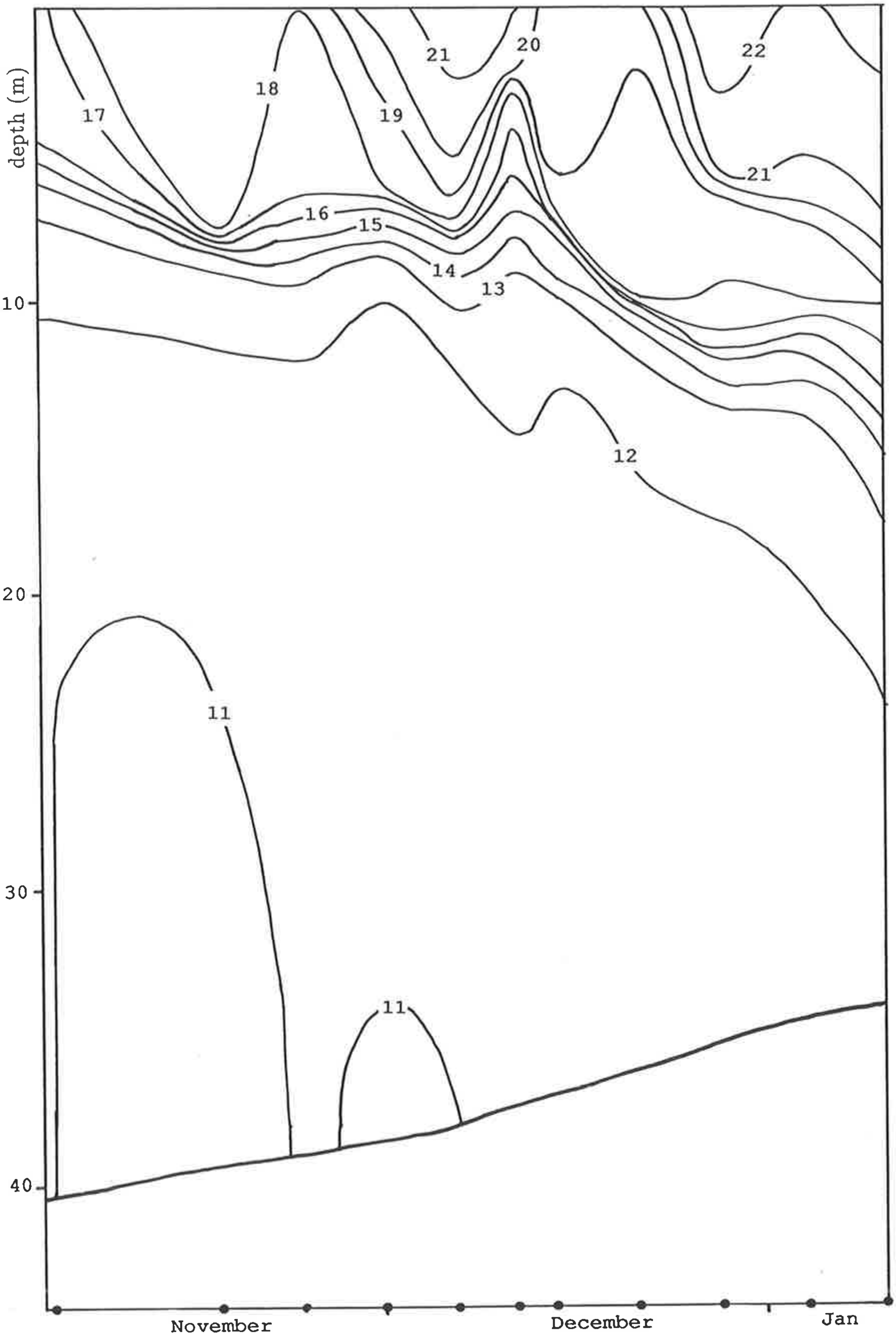


Figure 4.2 Water temperature variation with depth in Mt Bold Reservoir during the 1984/1985 study. Temperature profiles were taken at metre intervals on the dates indicated by dots. Isotherms are in °C.

Figure 4.3 Dissolved oxygen variation with depth in Mt Bold Reservoir during the 1984/1985 study. Dissolved oxygen profiles were taken at metre intervals on the dates indicated by dots. Isopleths are at intervals of 1 mg O_2 l^{-1}.

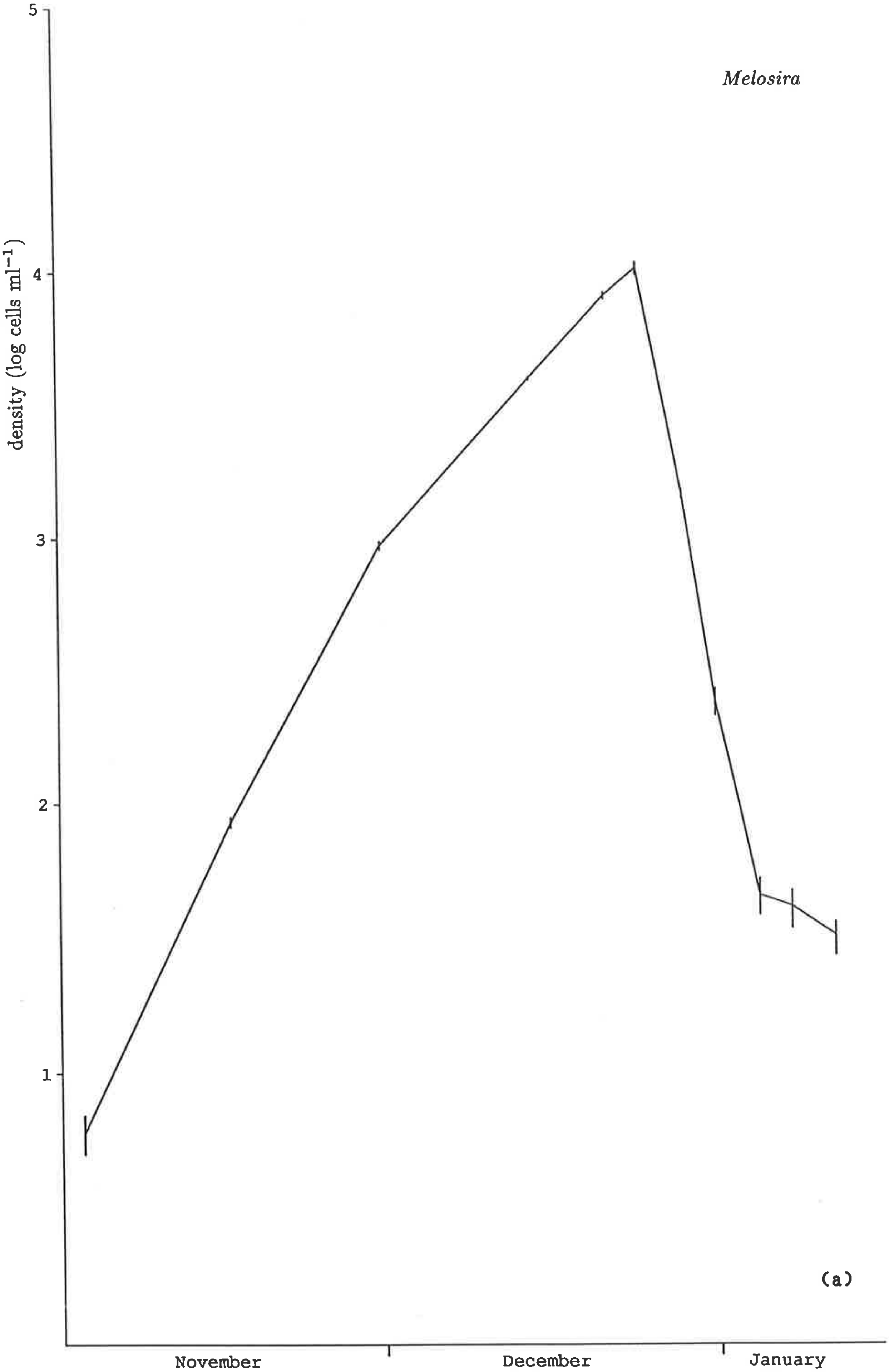


Figure 4.4a Mean (±se) density (log cells ml^{-1}) of *Melosira* in Mt Bold Reservoir during the 1984/1985 study.

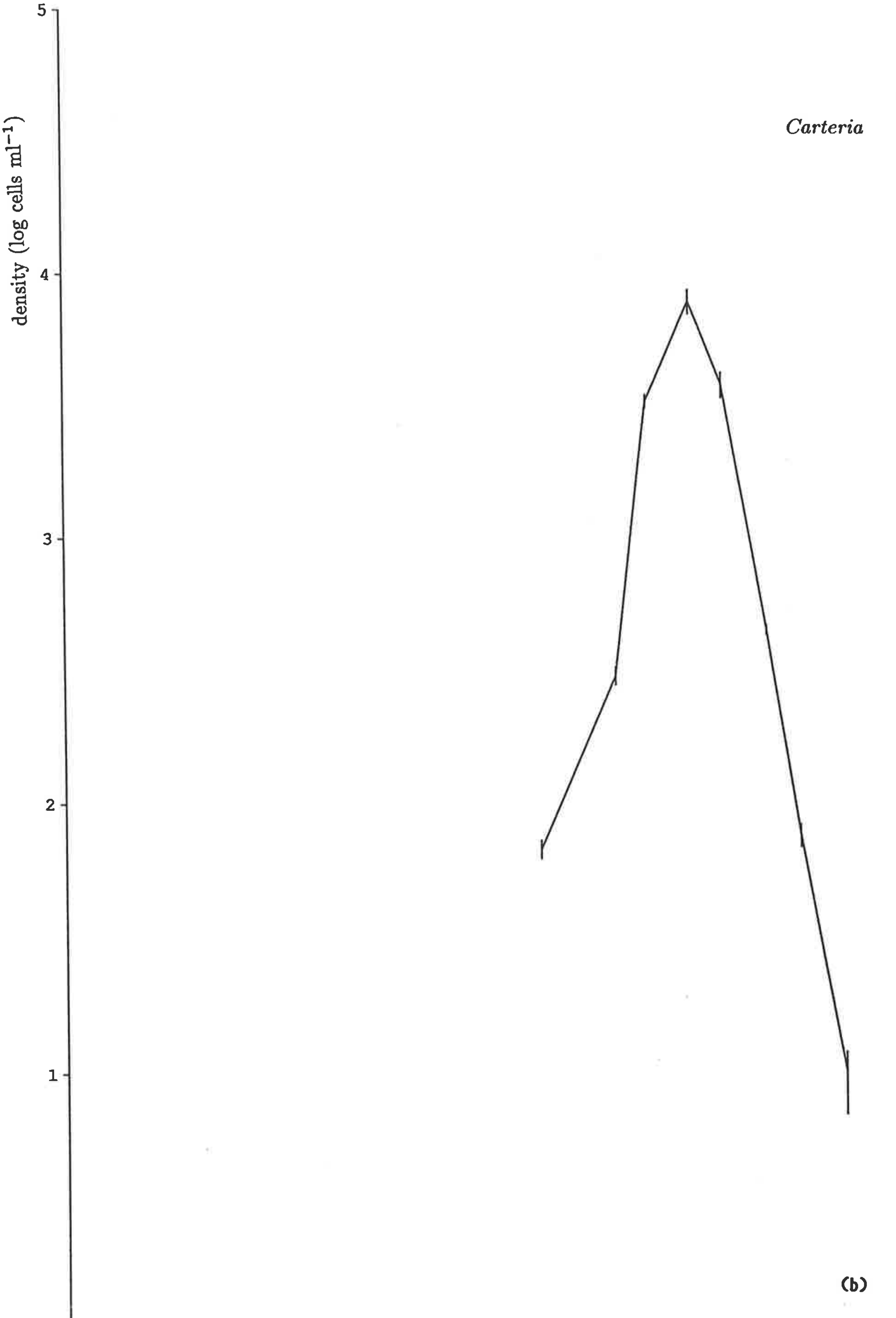


Figure 4.4b Mean (±se) density (log cells ml^{-1}) of *Carteria* in Mt Bold Reservoir during the 1984/1985 study.

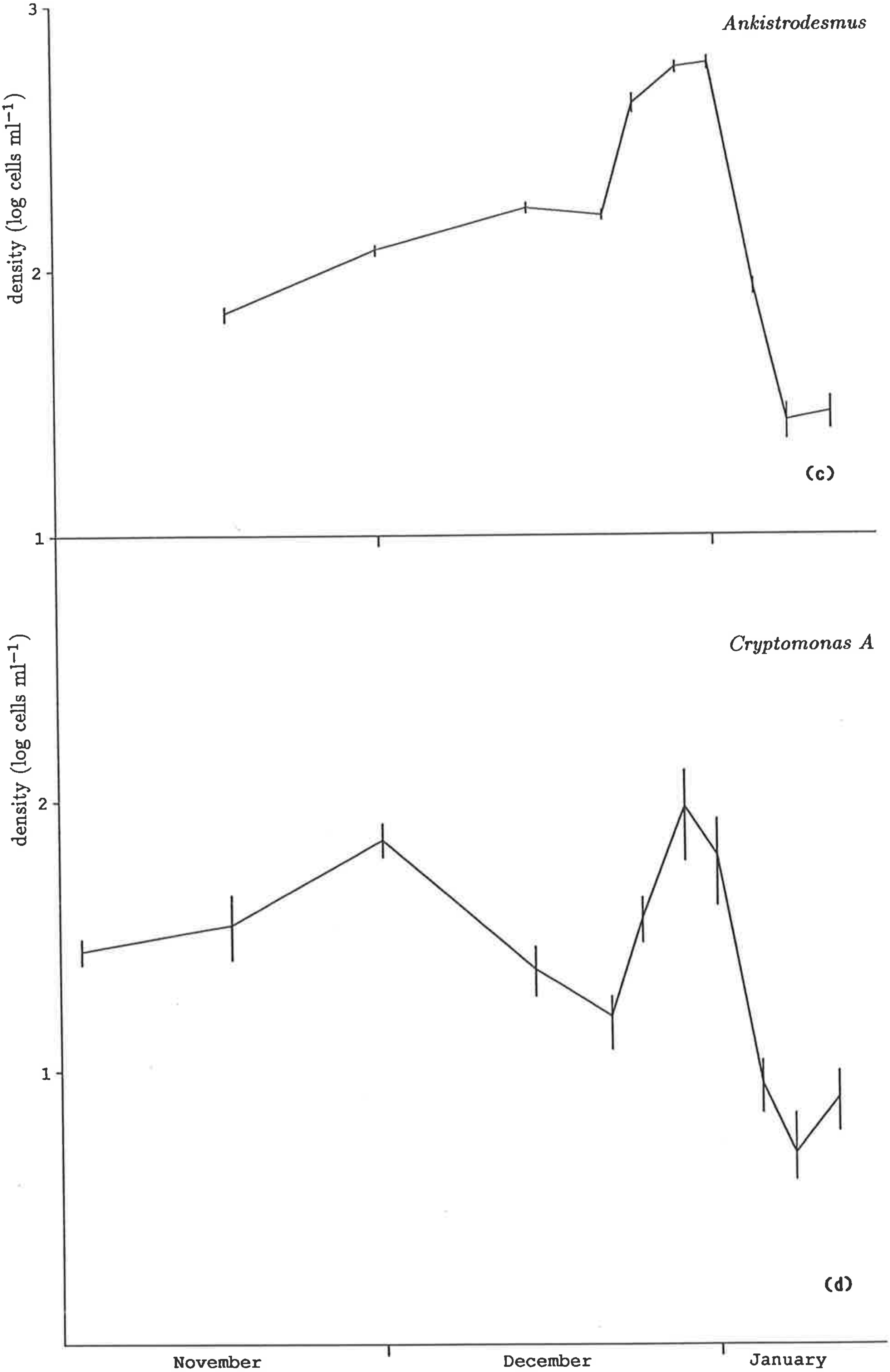


Figure 4.4c,d Mean (±se) density (log cells ml^{-1}) of (c) *Ankistrodesmus* and (d) *Cryptomonas A* in Mt Bold Reservoir during the 1984/1985 study.

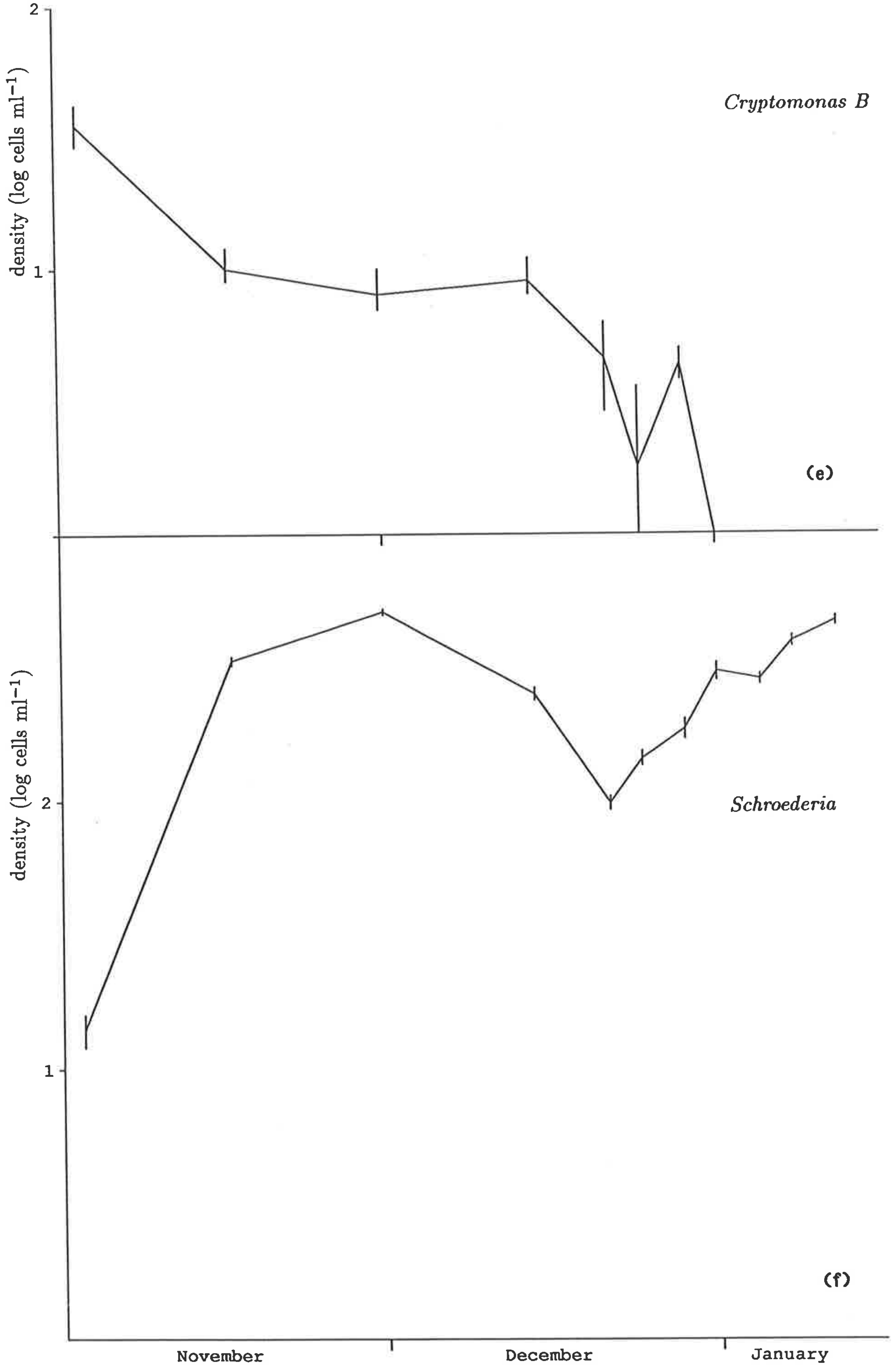


Figure 4.4e,f Mean (±se) density (log cells ml^{-1}) of (e) *Cryptomonas B* and (f) *Schroederia* in Mt Bold Reservoir during the 1984/1985 study.

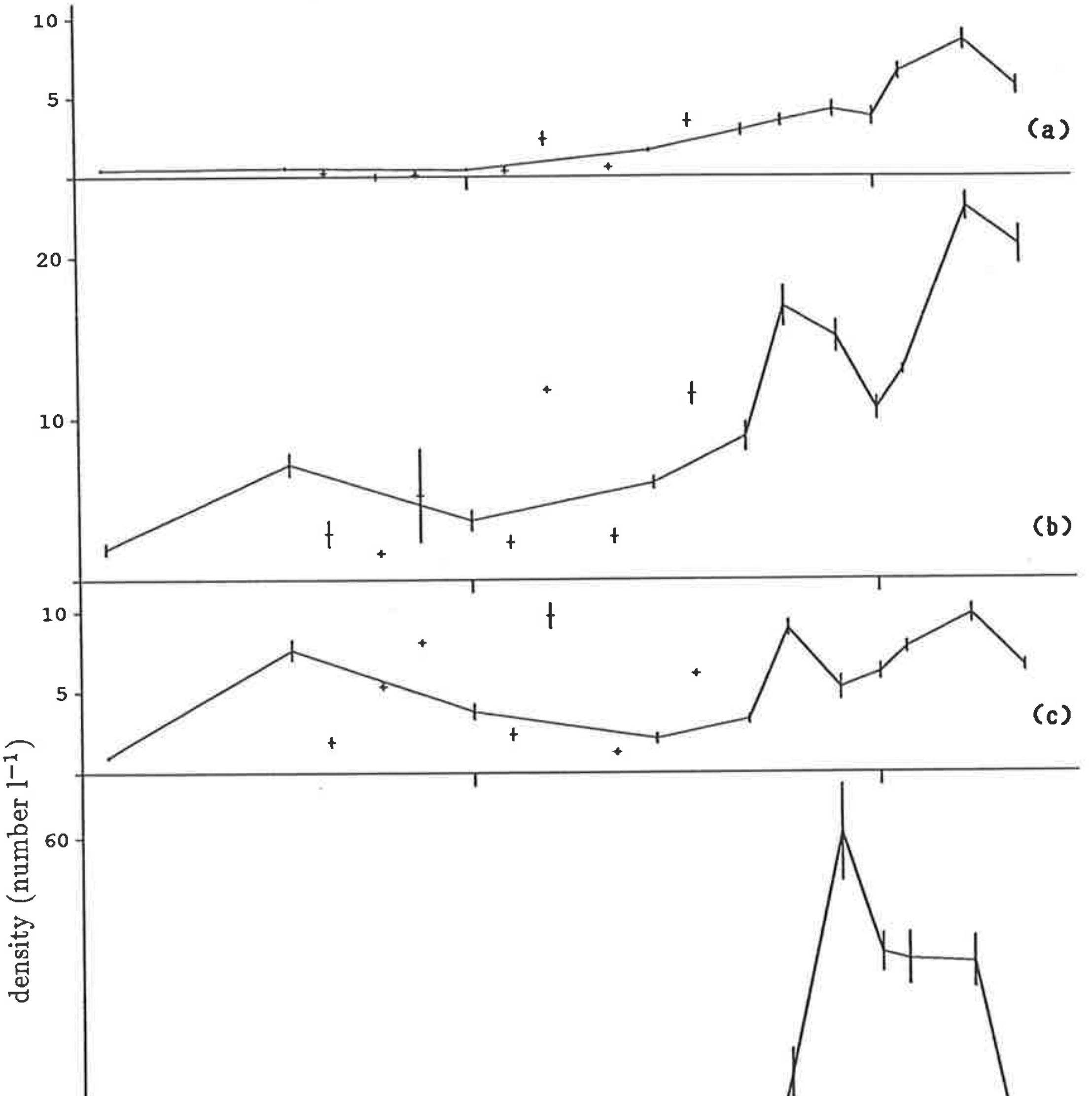


Figure 4.5a-d Mean (±se) density (number l^{-1}) of the copepods; (a) *Boeckella triarticulata*, (b) *Calamoecia ampulla*, (c) calanoid copepodites, and (d) copepod nauplii in Mt Bold Reservoir during the 1984/1985 study. Line connects mean densities across five sites; isolated points are the mean densities from the southern site only.

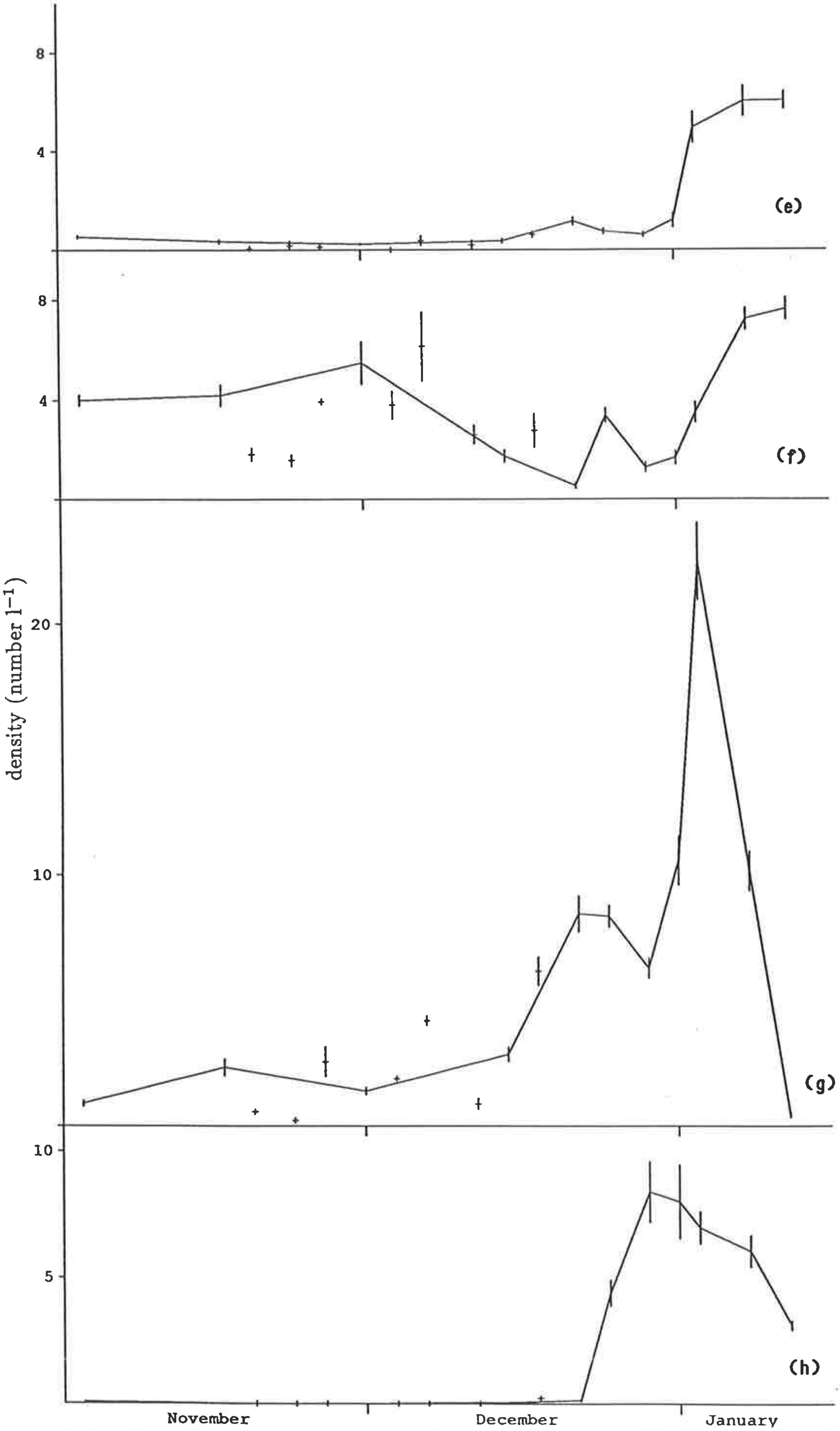


Figure 4.5e-h Mean (±se) density (number l^{-1}) of the cladocerans; (e) *Daphnia carinata*, (f) *Ceriodaphnia quadrangula*, (g) *Diaphanosoma unguiculatum*, and (h) *Bosmina meridionalis* in Mt Bold Reservoir during the 1984/1985 study. Line connects mean densities across five sites; isolated points are the mean densities from the southern site only.

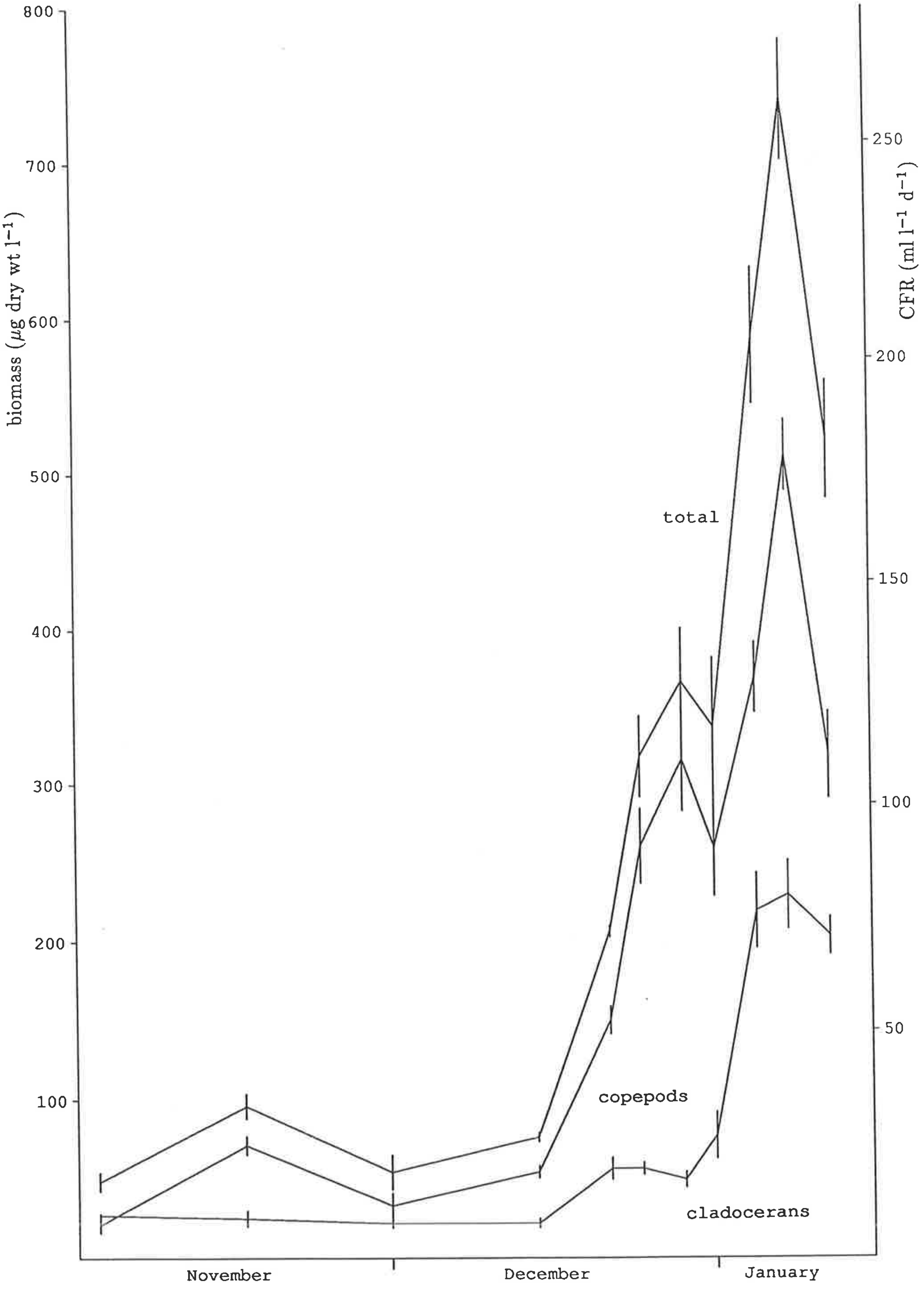
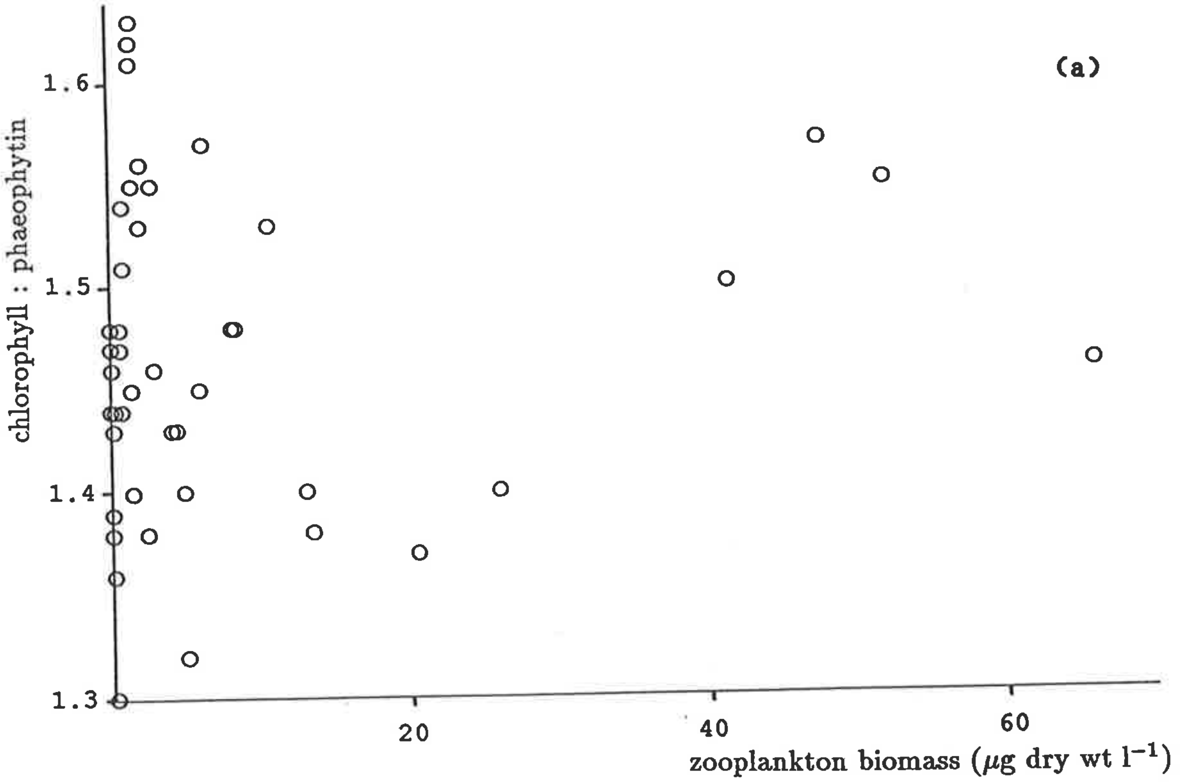


Figure 4.6 Mean (±se) total zooplankton biomass (μg dry wt l^{-1}) [upper line] in Mt Bold Reservoir during the 1984/1985 study. The contributions of copepods [middle line] and cladocerans [lower line] are shown. The estimated community filtering rate [CFR] (ml l^{-1} d^{-1}) is indicated.



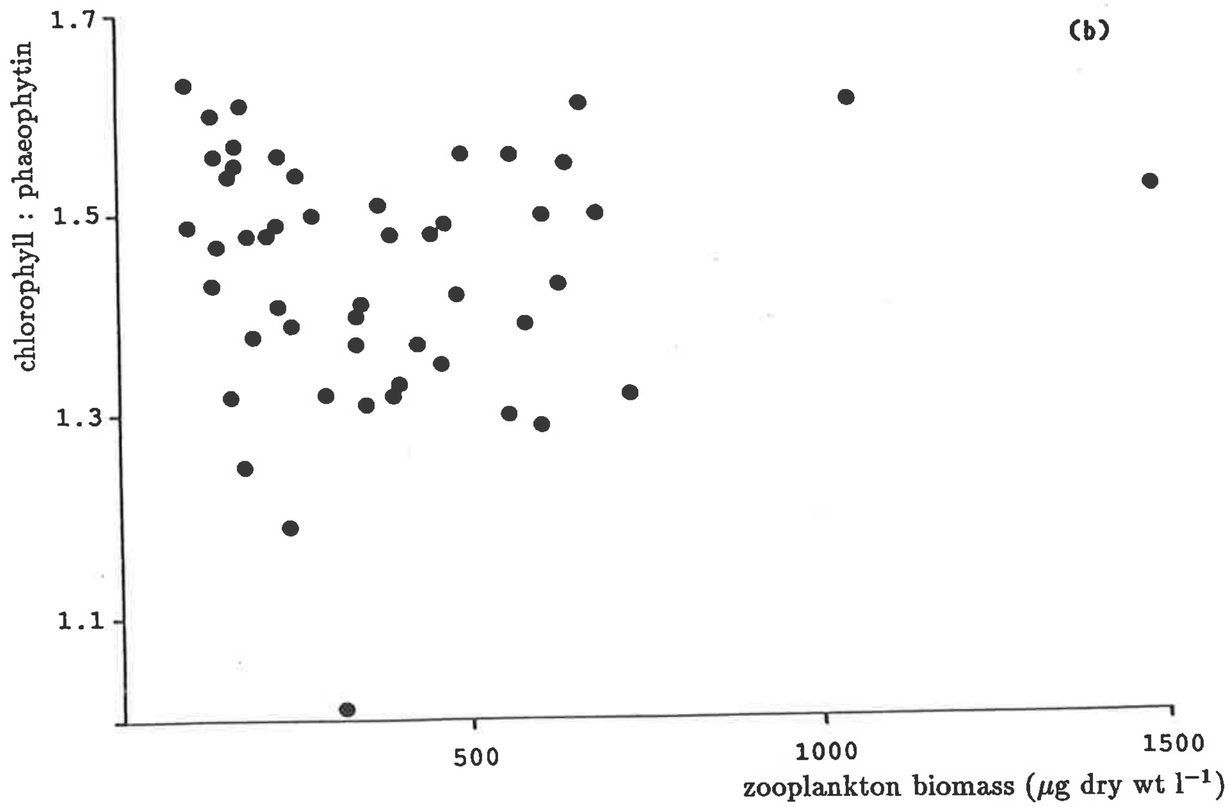


Figure 5.1 Relationship between final zooplankton biomass (μg l^{-1}) and the chlorophyll *a* : phaeophytin *a* ratio in the (a) ungrazed and (b) grazed enclosures.

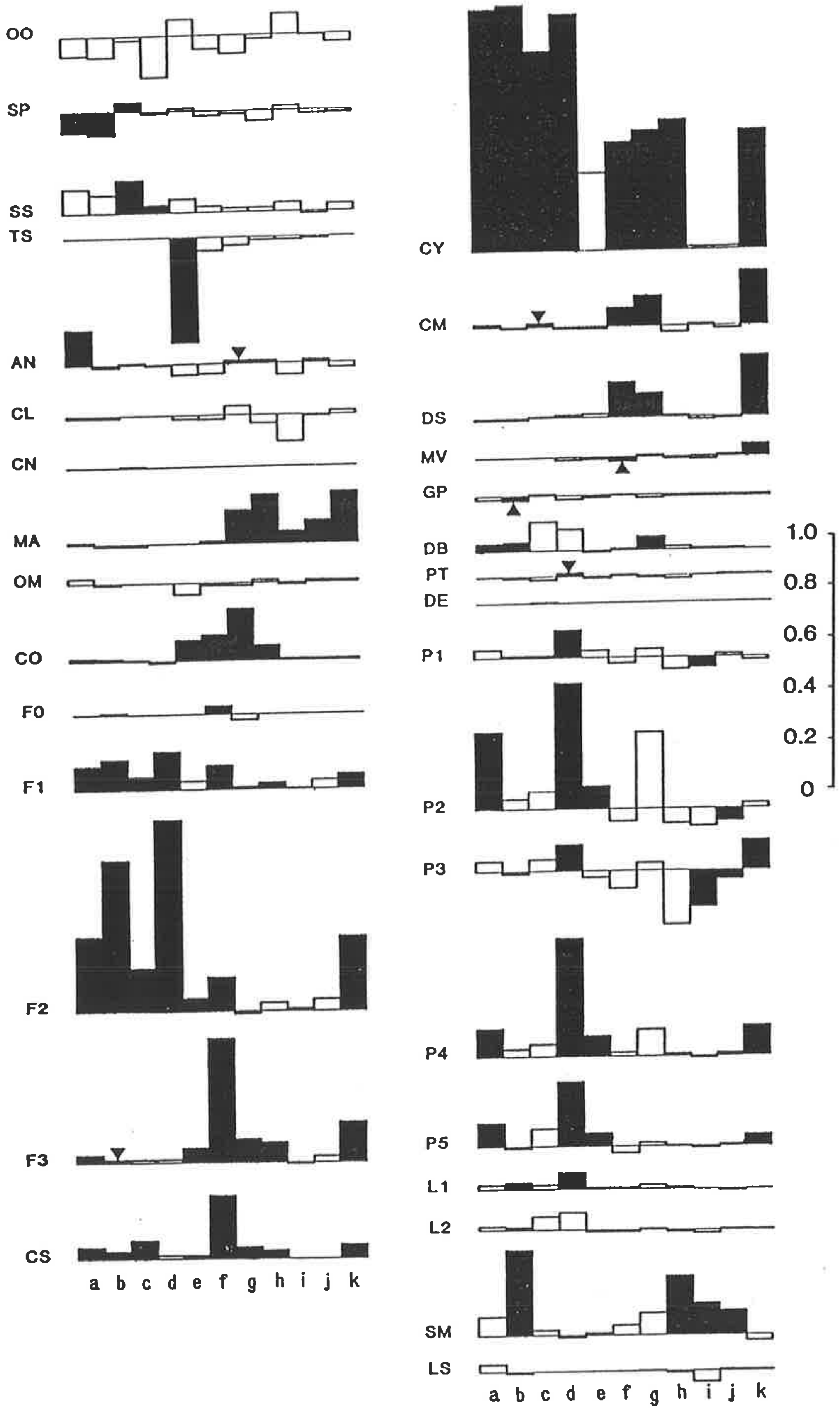


Figure 5.2 Difference in mean frequency of the phytoplankton taxa (OO-LS) in each of the eleven enclosure experiments (a-k). Proportional differences are shown for the ungrazed treatments relative to the grazed treatments with increases above the line and decreases below. Significant differences within each experiment are shaded or marked by an arrow. See Table 5.31 for taxa codes.

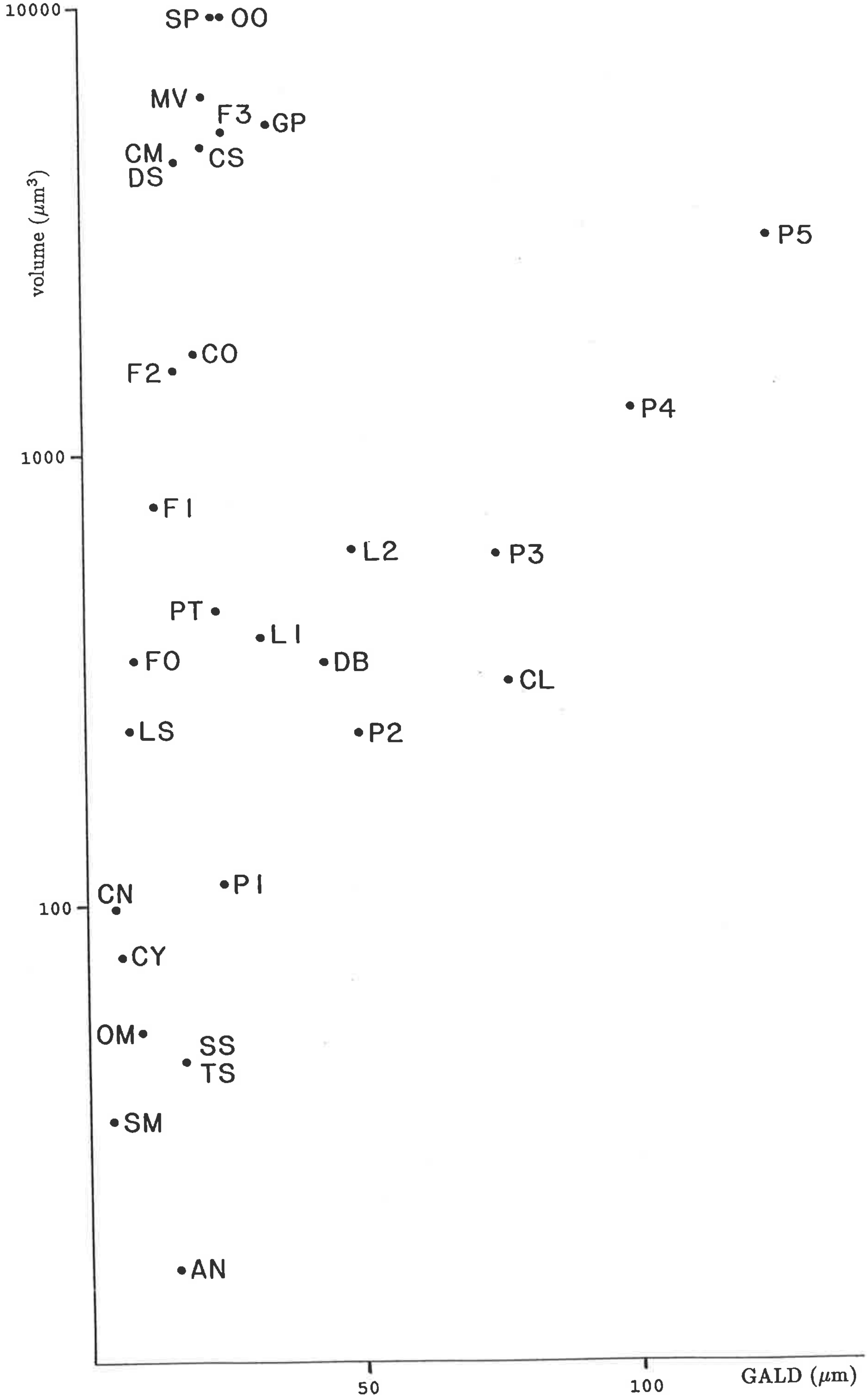


Figure 5.3 Greatest axial linear dimension (GALD) and biomass-unit volume of the phytoplankton taxa in the enclosure experiments. See Table 5.31 for taxa codes.

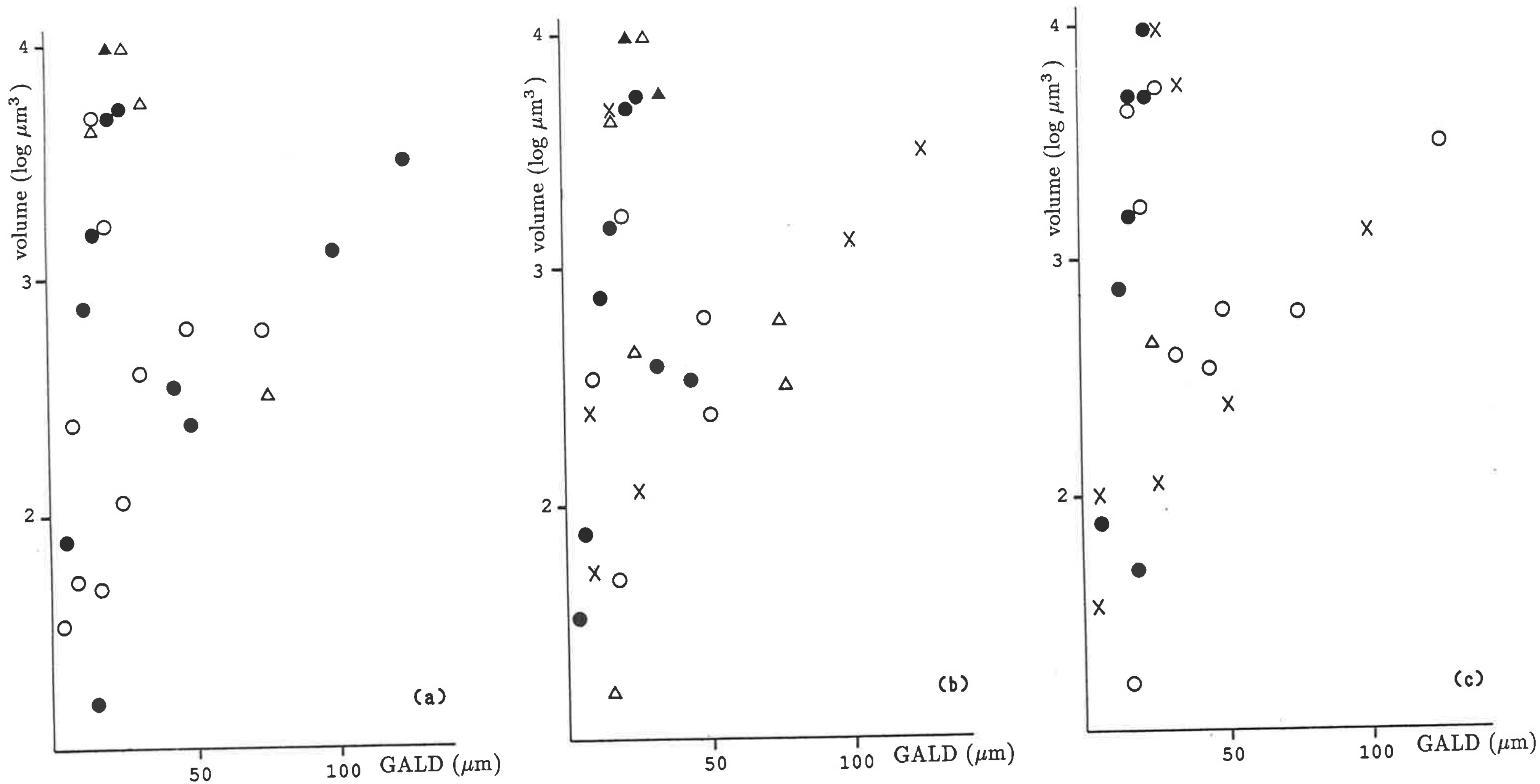


Figure 5.4 Responses of individual phytoplankton taxa to grazing in the eleven enclosure experiments (a-k) with respect to GALD and biomass-unit volume. Circles represent decreases, triangles represent increases and crosses represent no change. Closed symbols indicate a significant ($P < 0.05$) response to grazing. Individual phytoplankton taxa may be identified from their location on Figure 5.3.

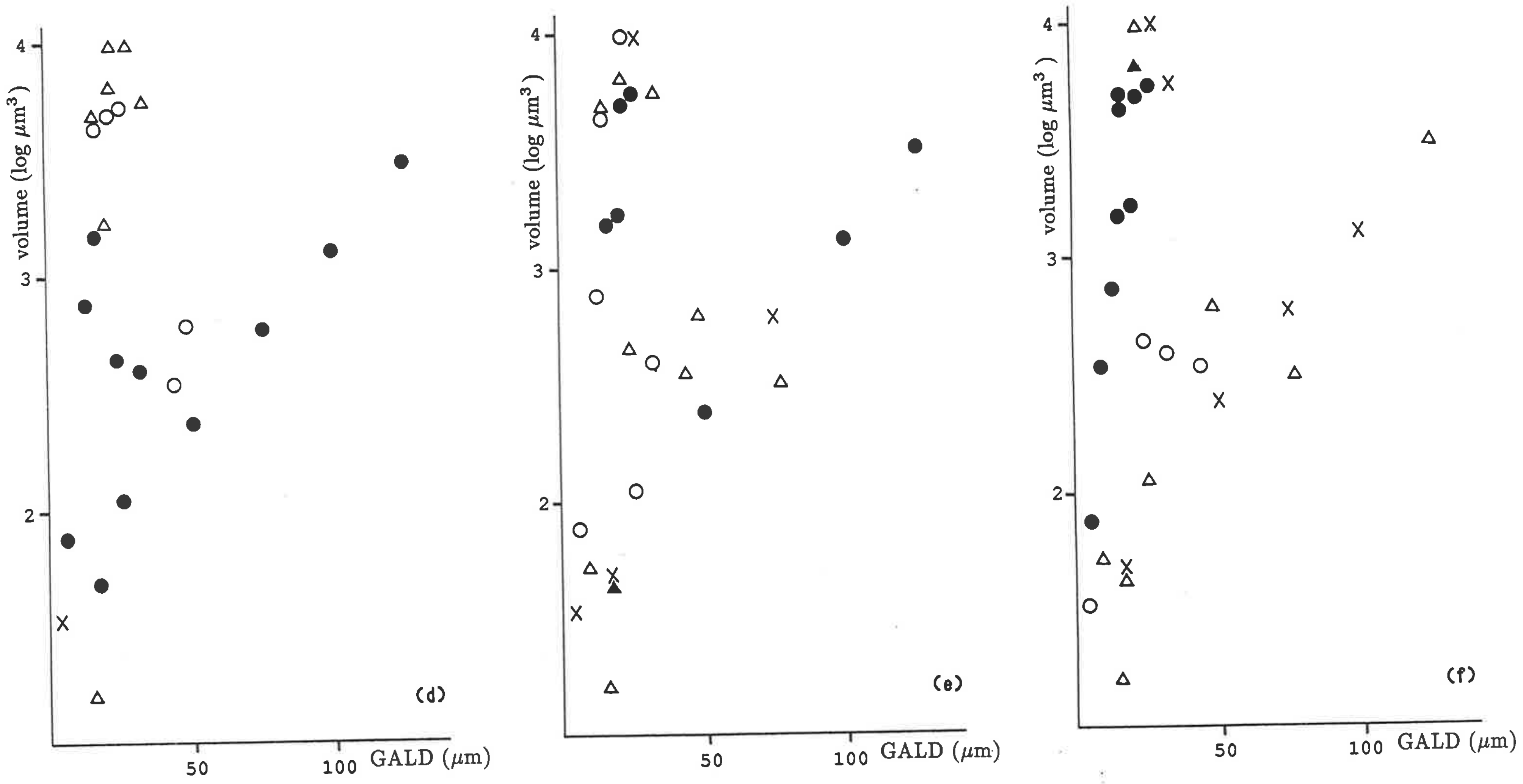


Figure 5.4 continued

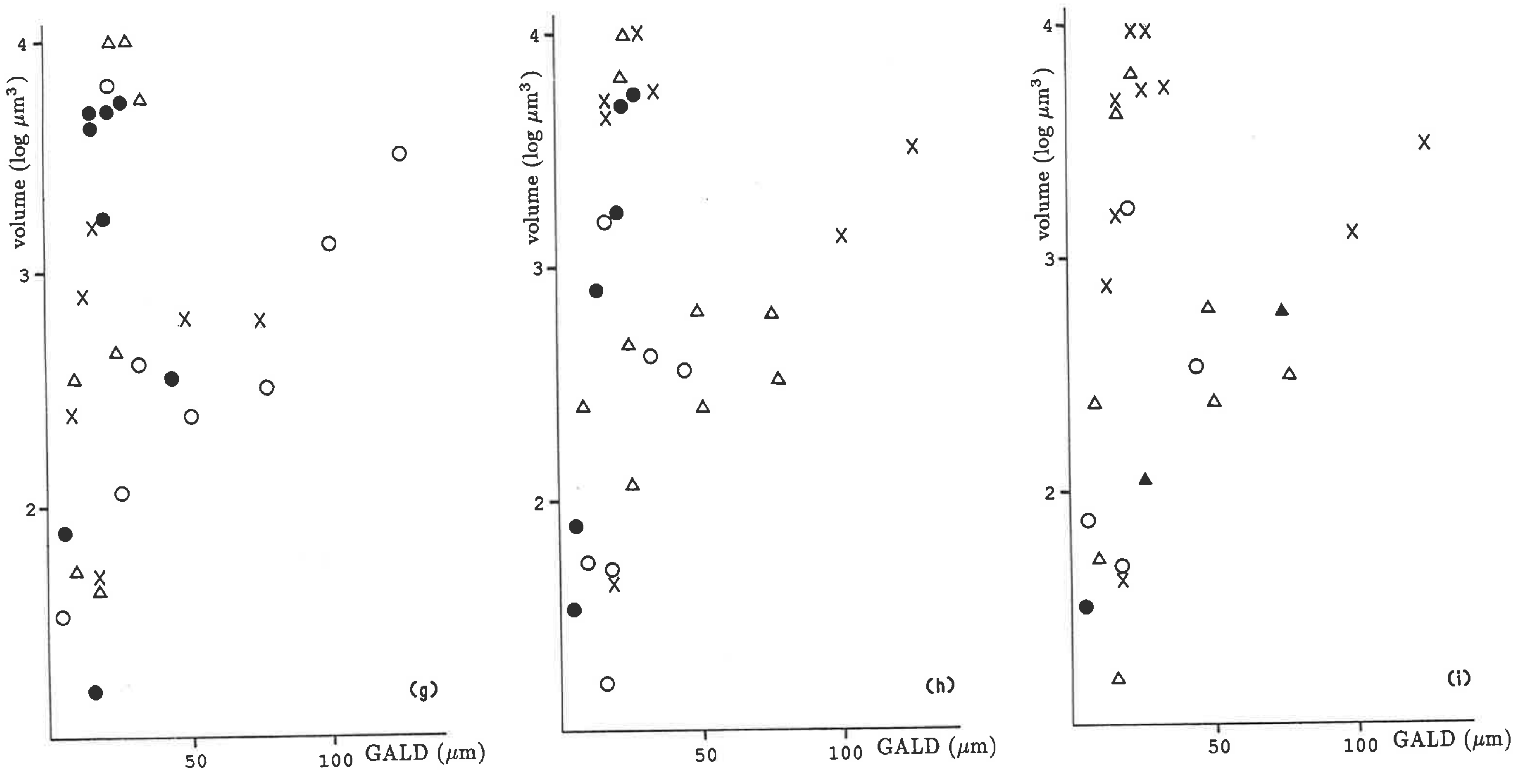


Figure 5.4 continued

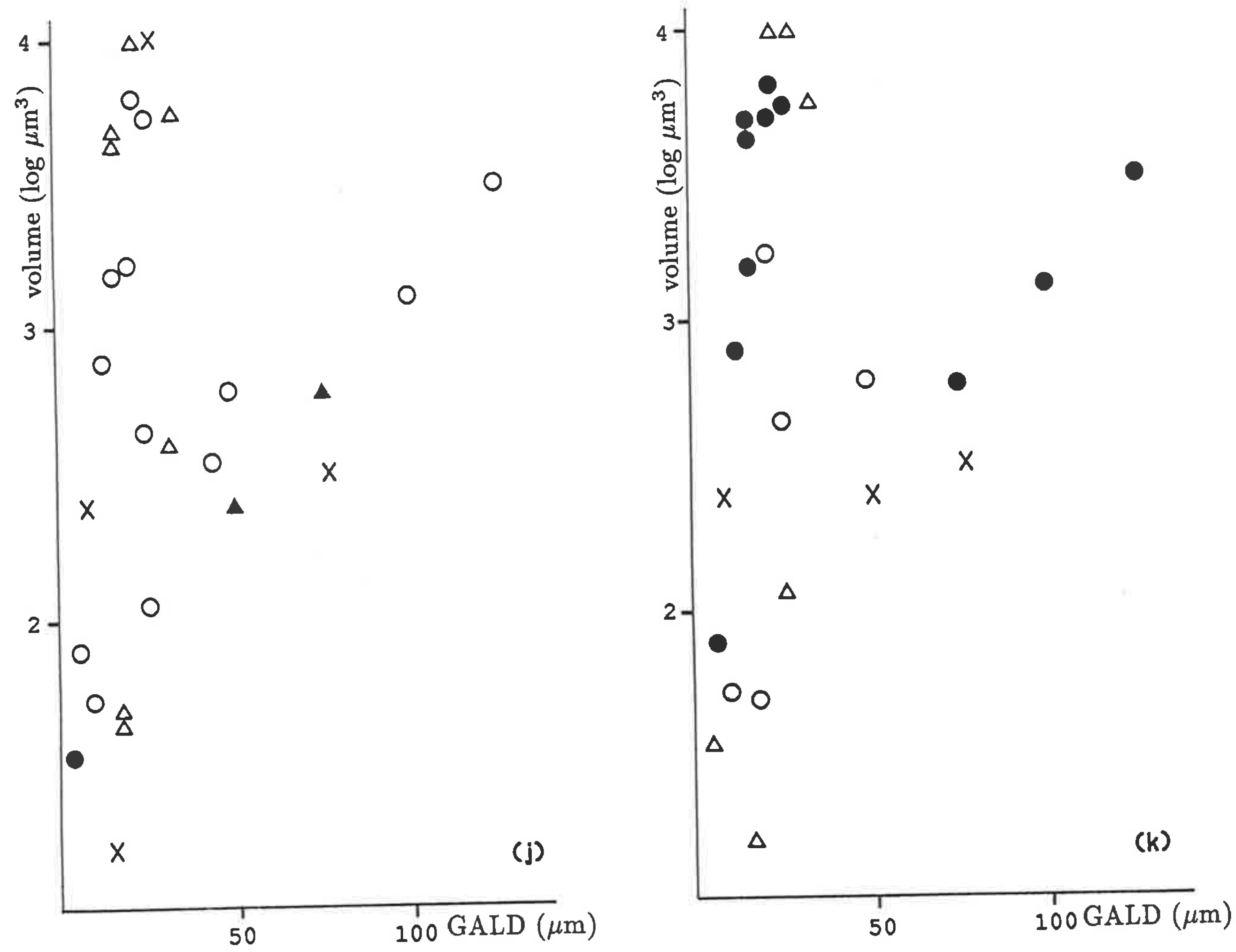
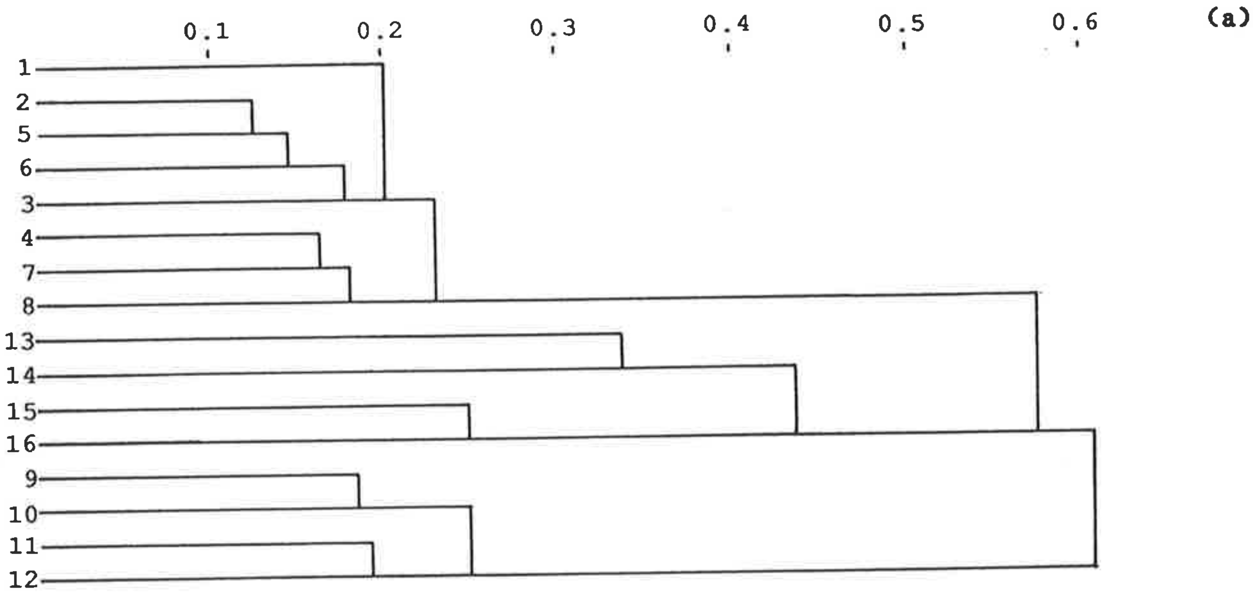


Figure 5.4 continued



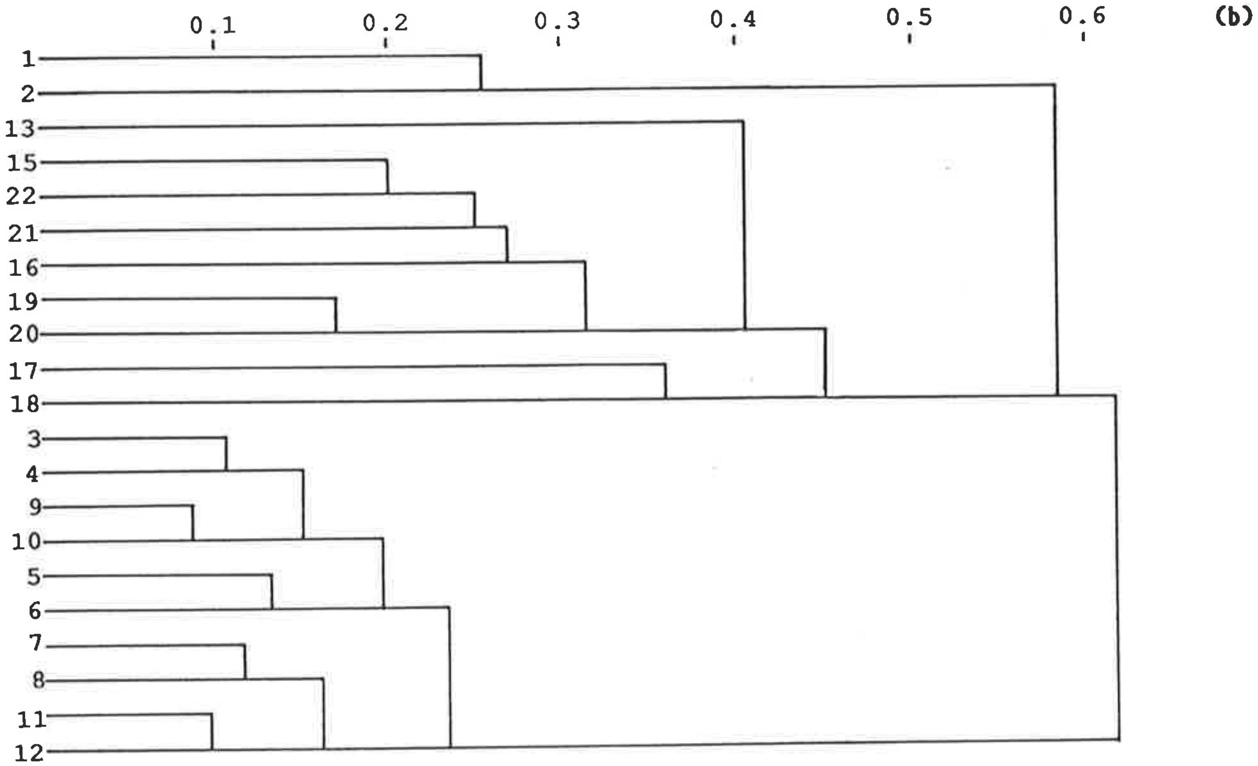
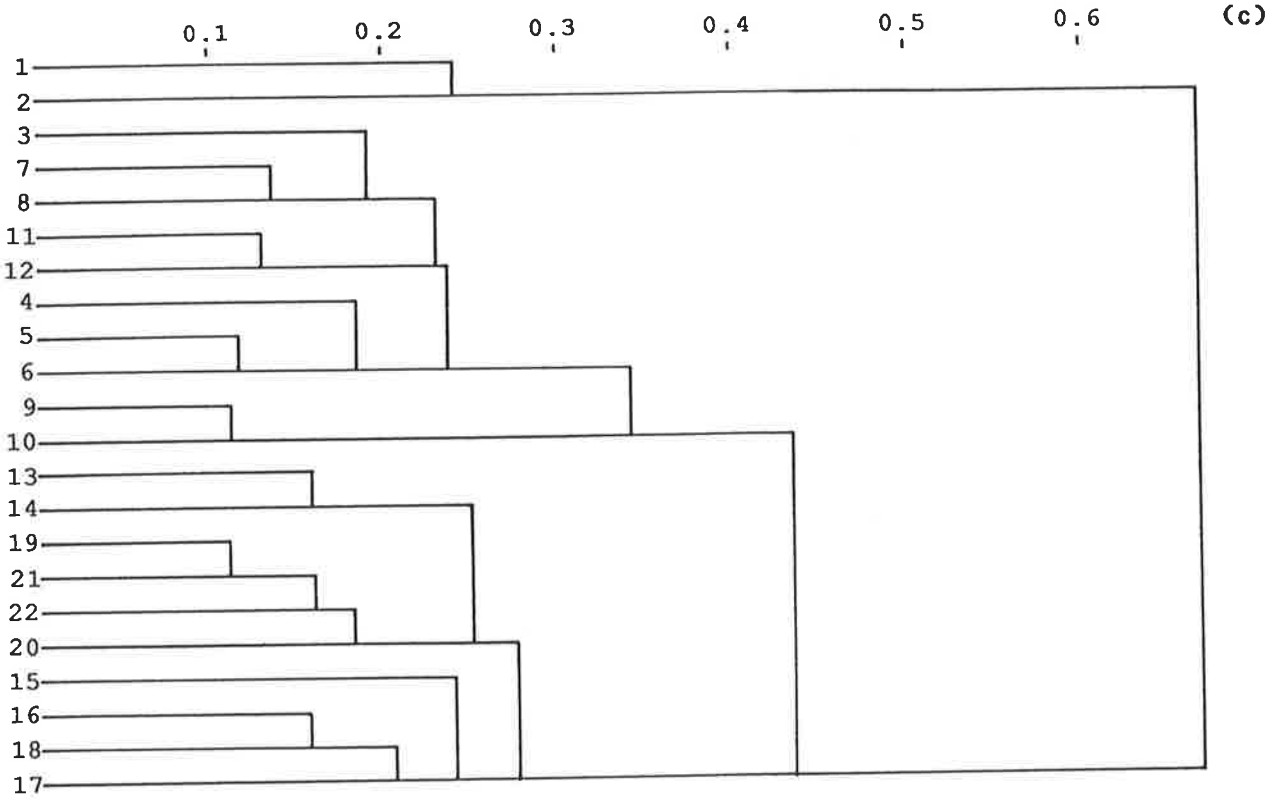


Figure 5.5 Dendrogram showing the average dissimilarity of the enclosures in each of the eleven experiments (a-k) using phytoplankton frequency. Refer to text for explanation of sample numbers.



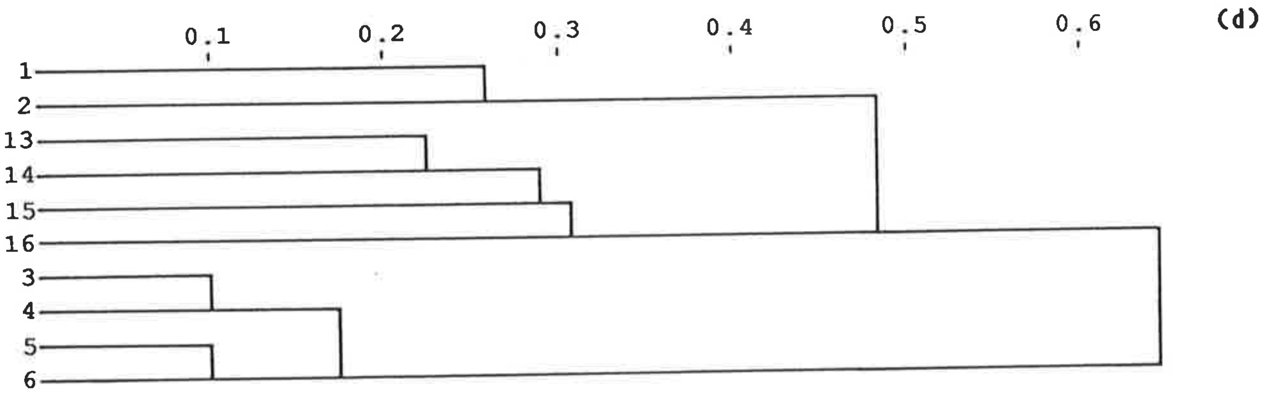
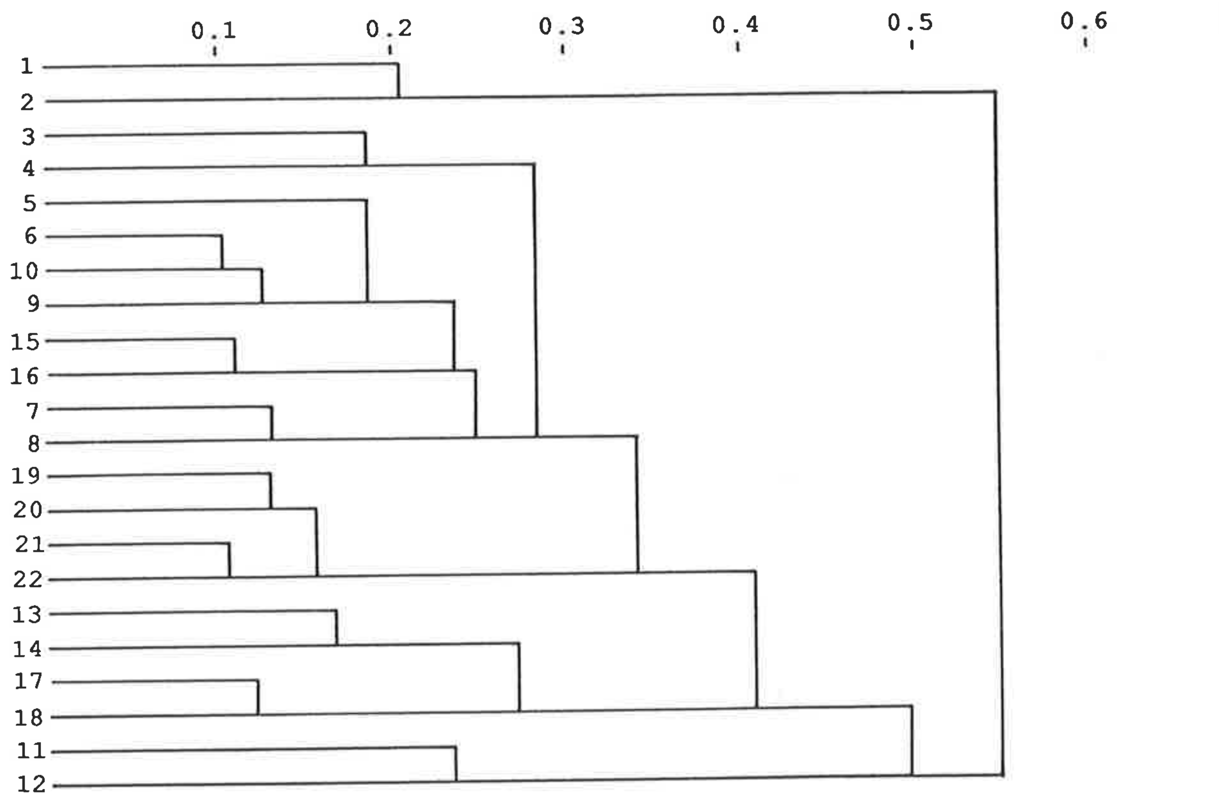


Figure 5.5 continued



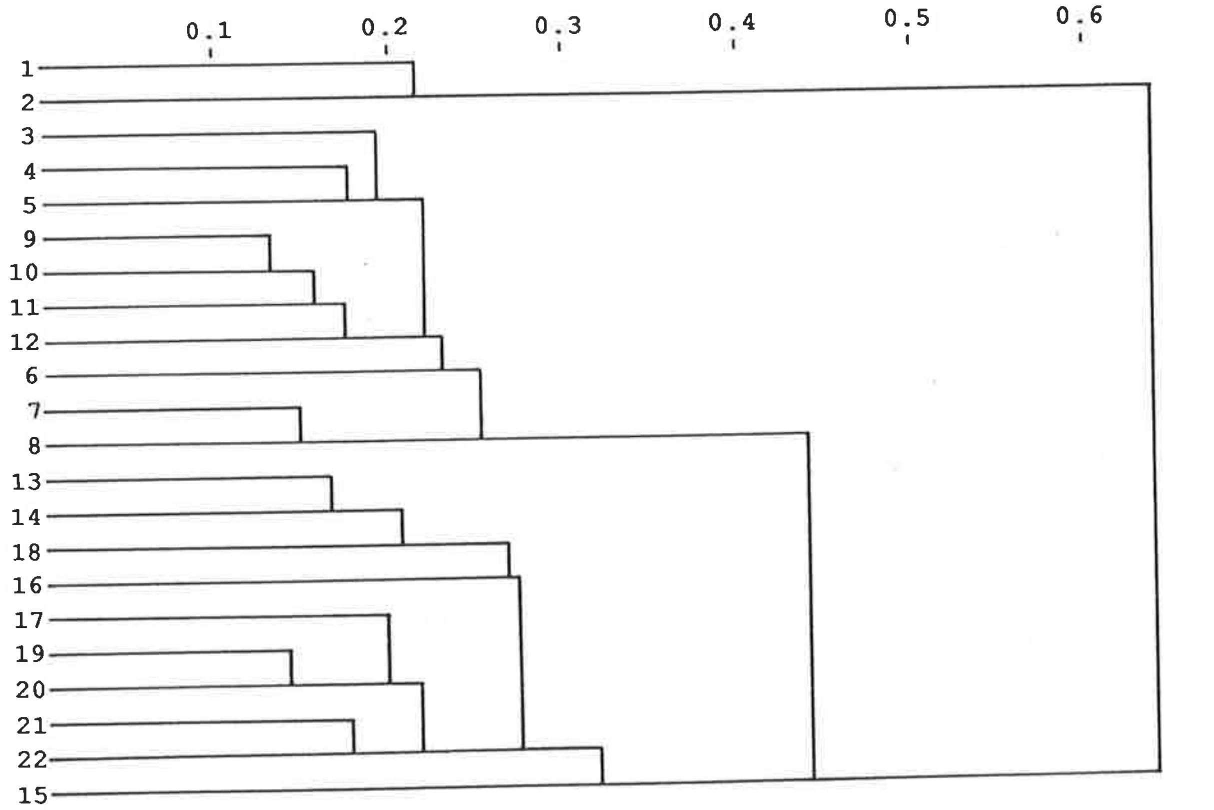
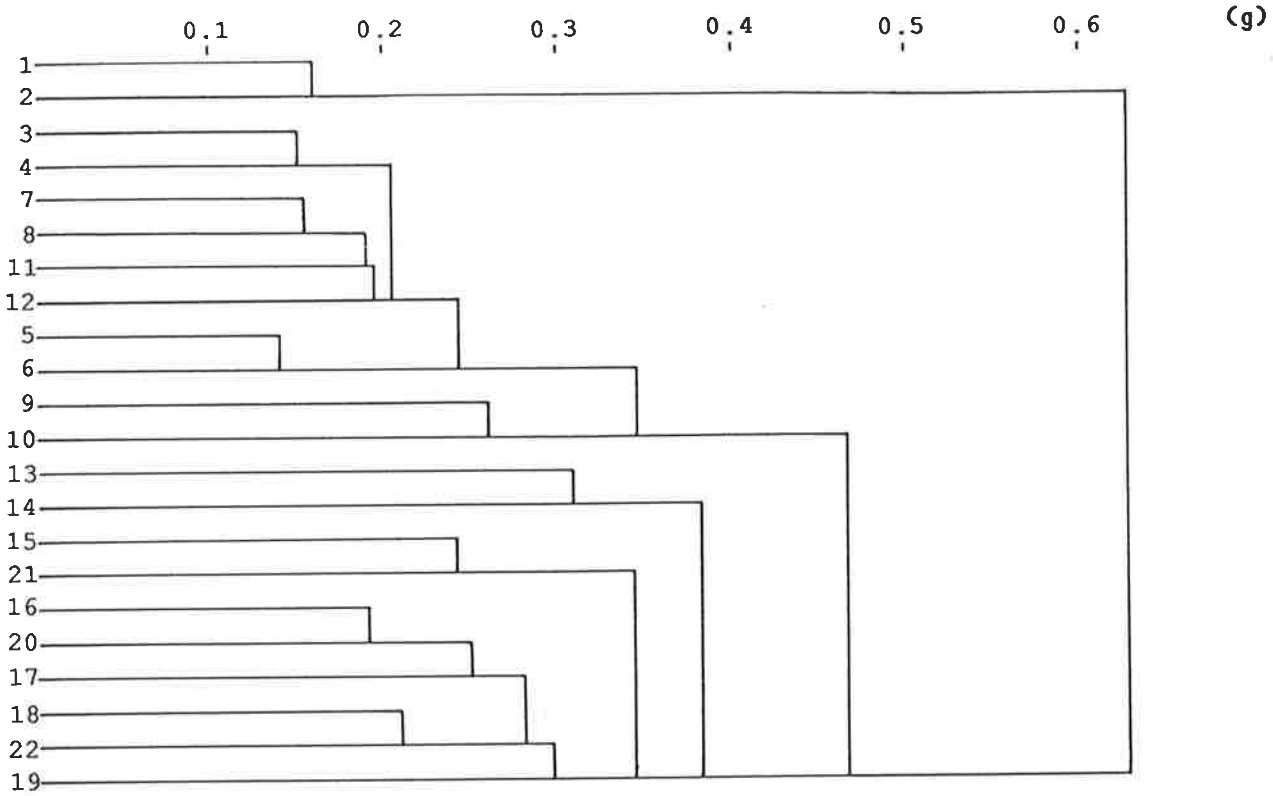


Figure 5.5 continued



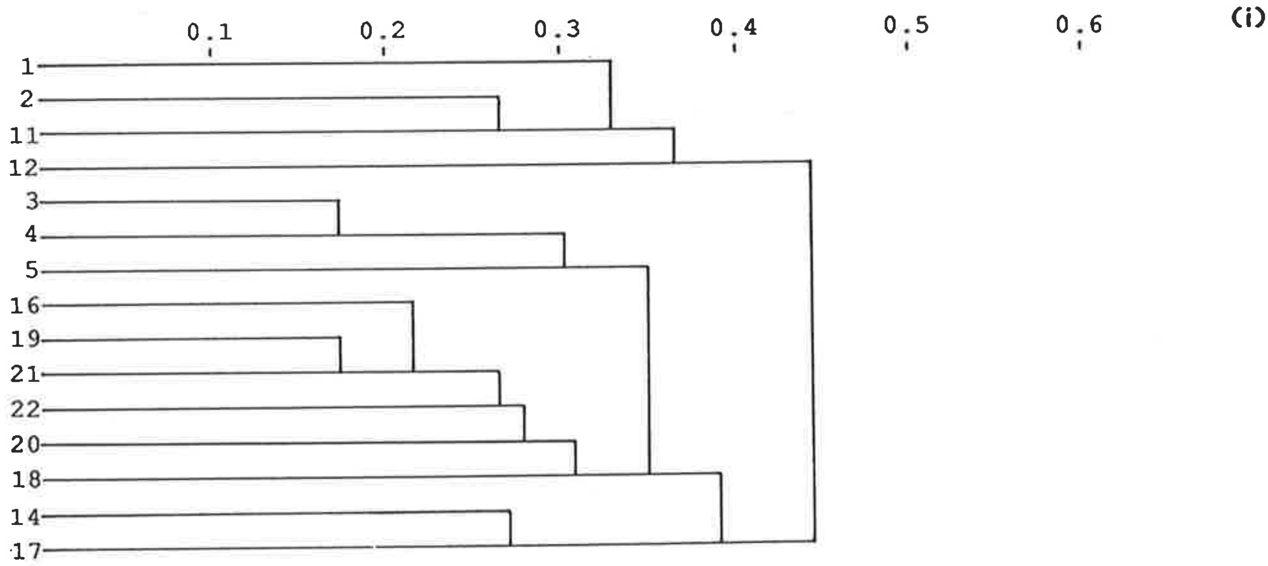
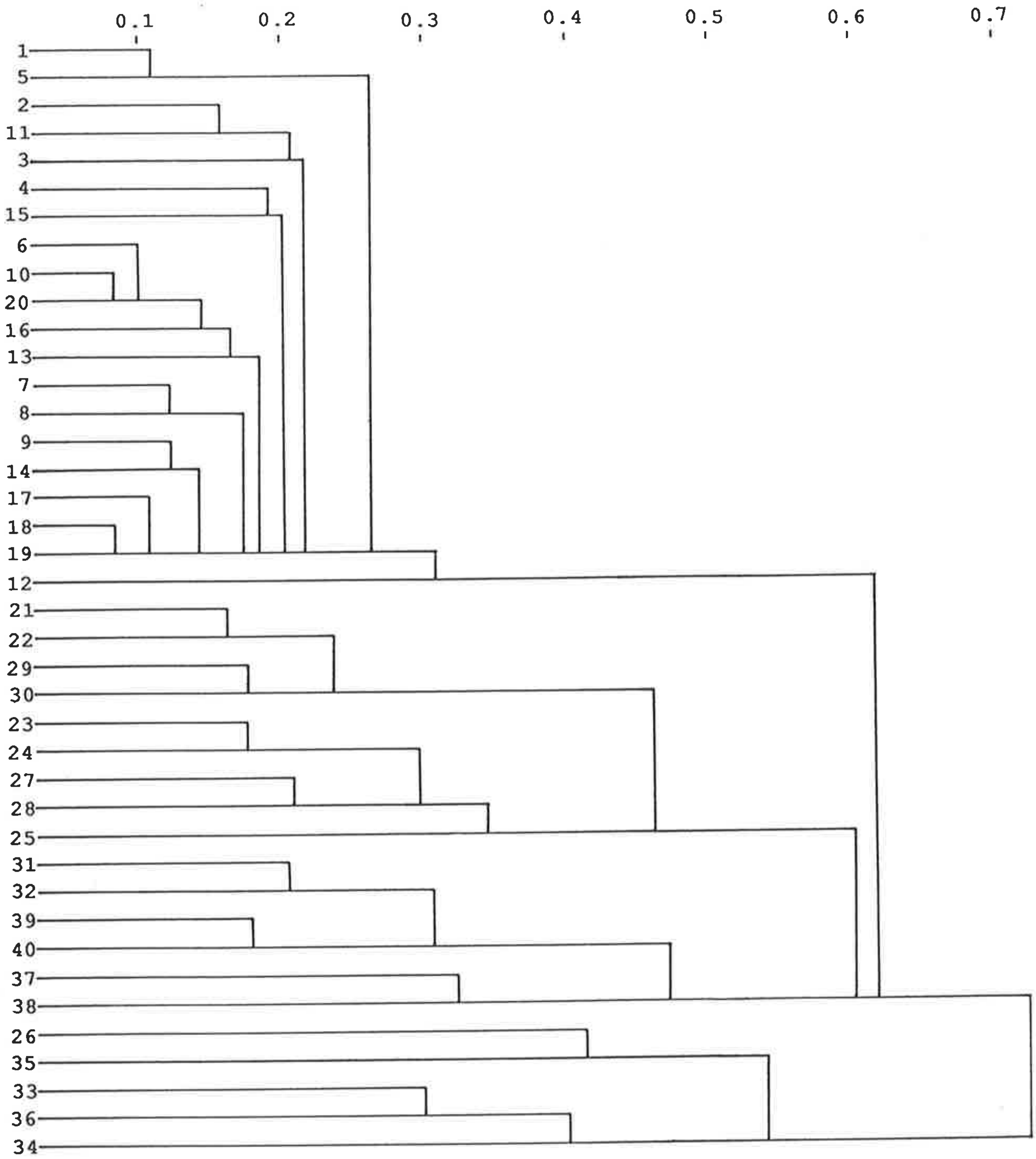
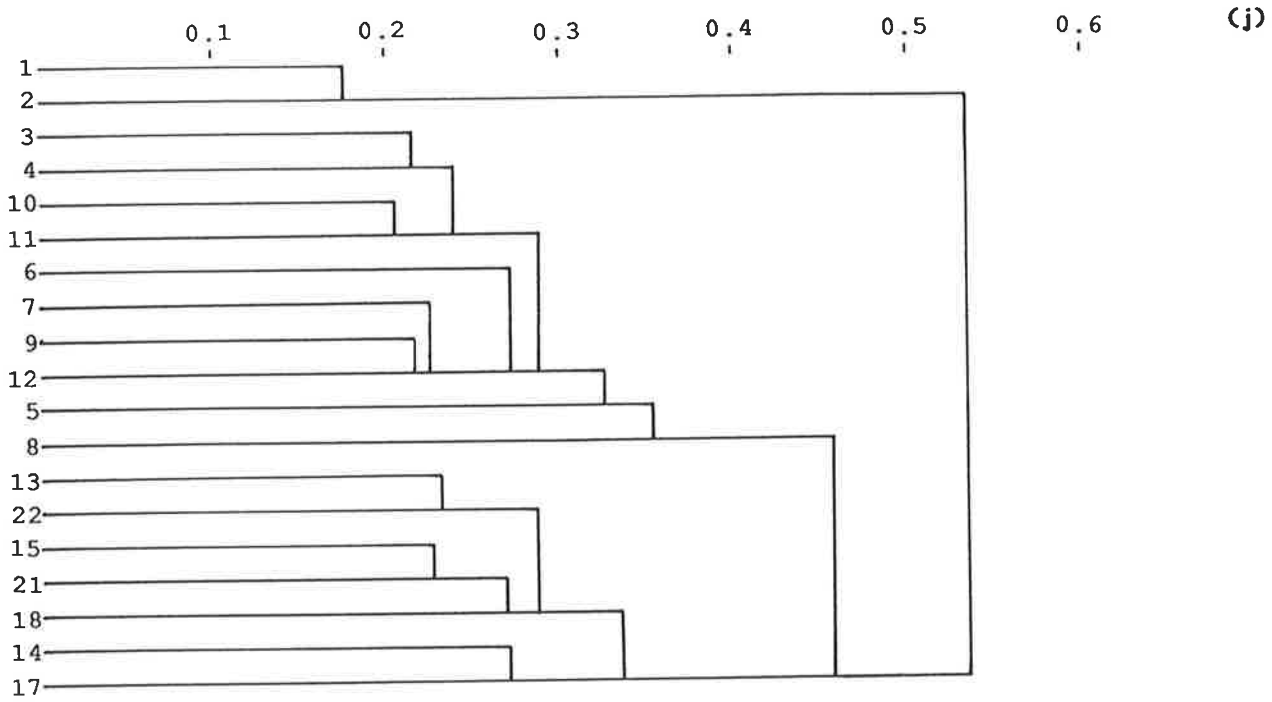


Figure 5.5 continued



(h)

Figure 5.5 continued



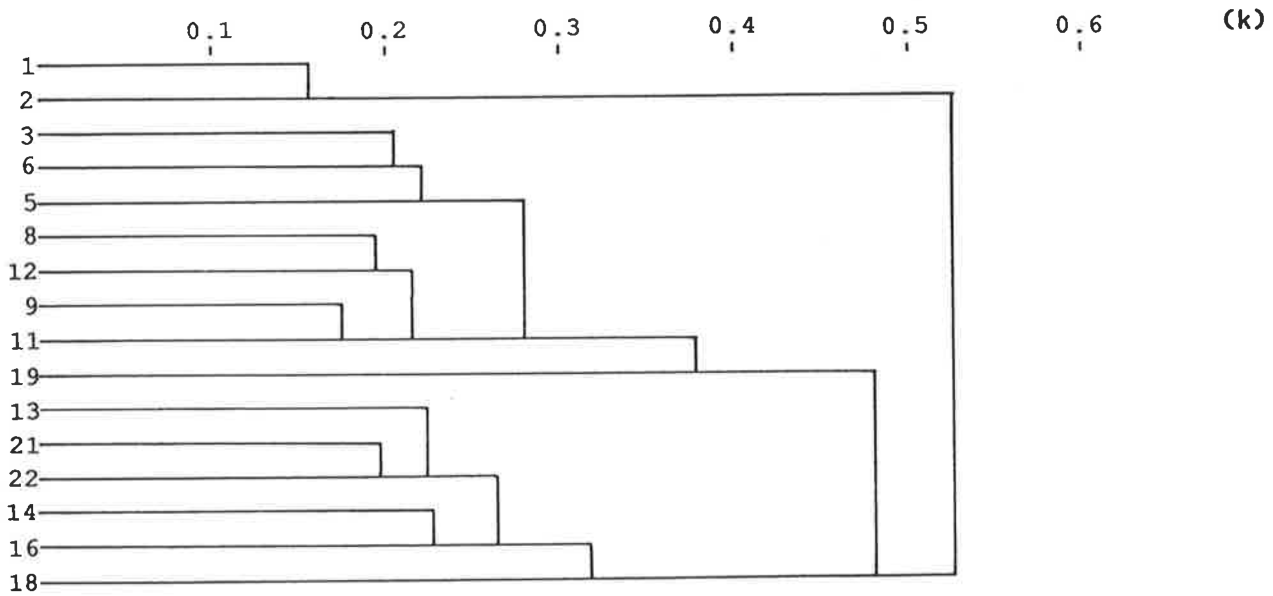


Figure 5.5 continued

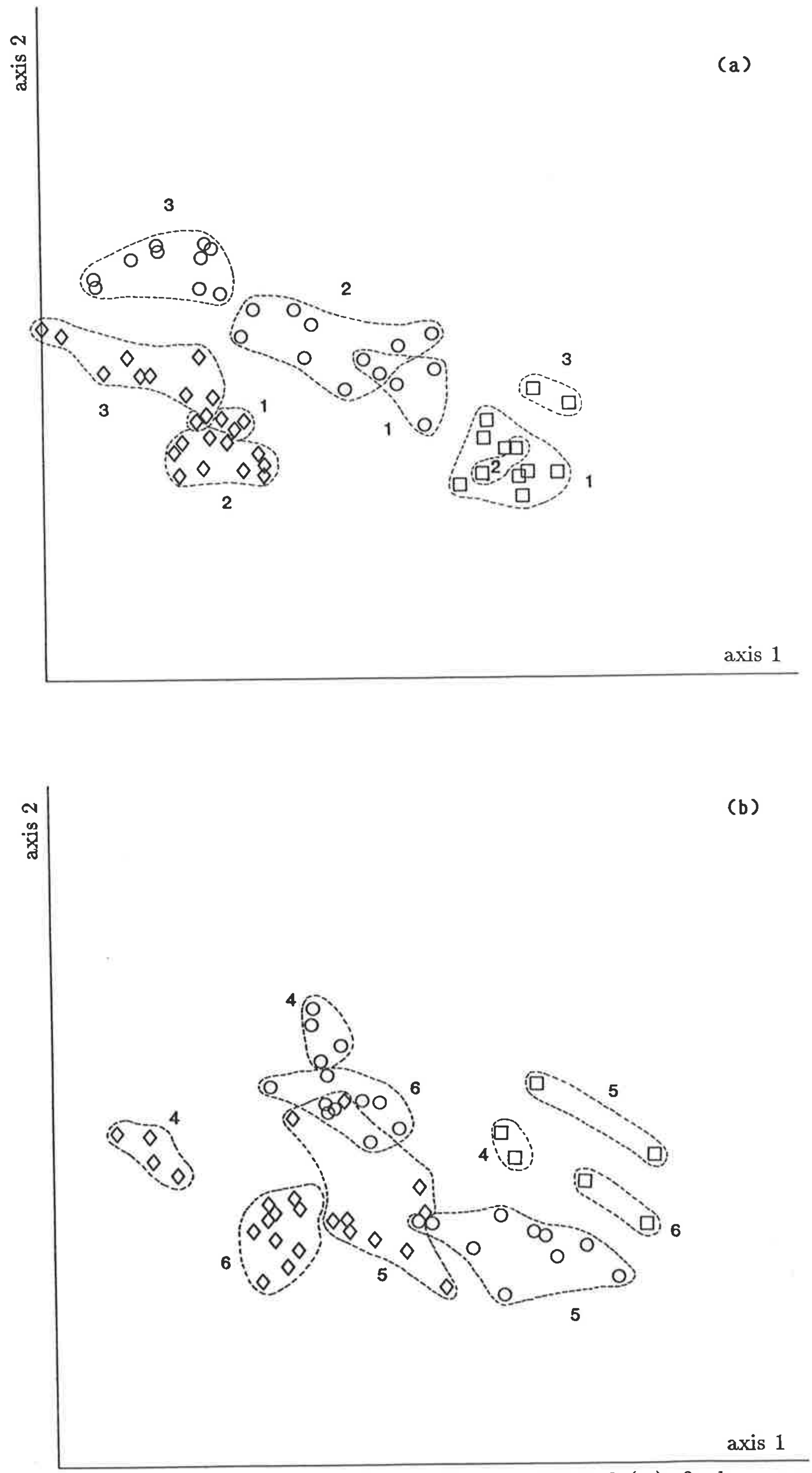


Figure 5.6 Detrended correspondence analysis ordination of initial (□), final ungrazed (◇), and final grazed (○) samples from the enclosures of all experiments (1-11) using phytoplankton frequency. Groups of experiments are plotted separately (a-d) to facilitate interpretation and samples from each treatment are grouped in each experiment.

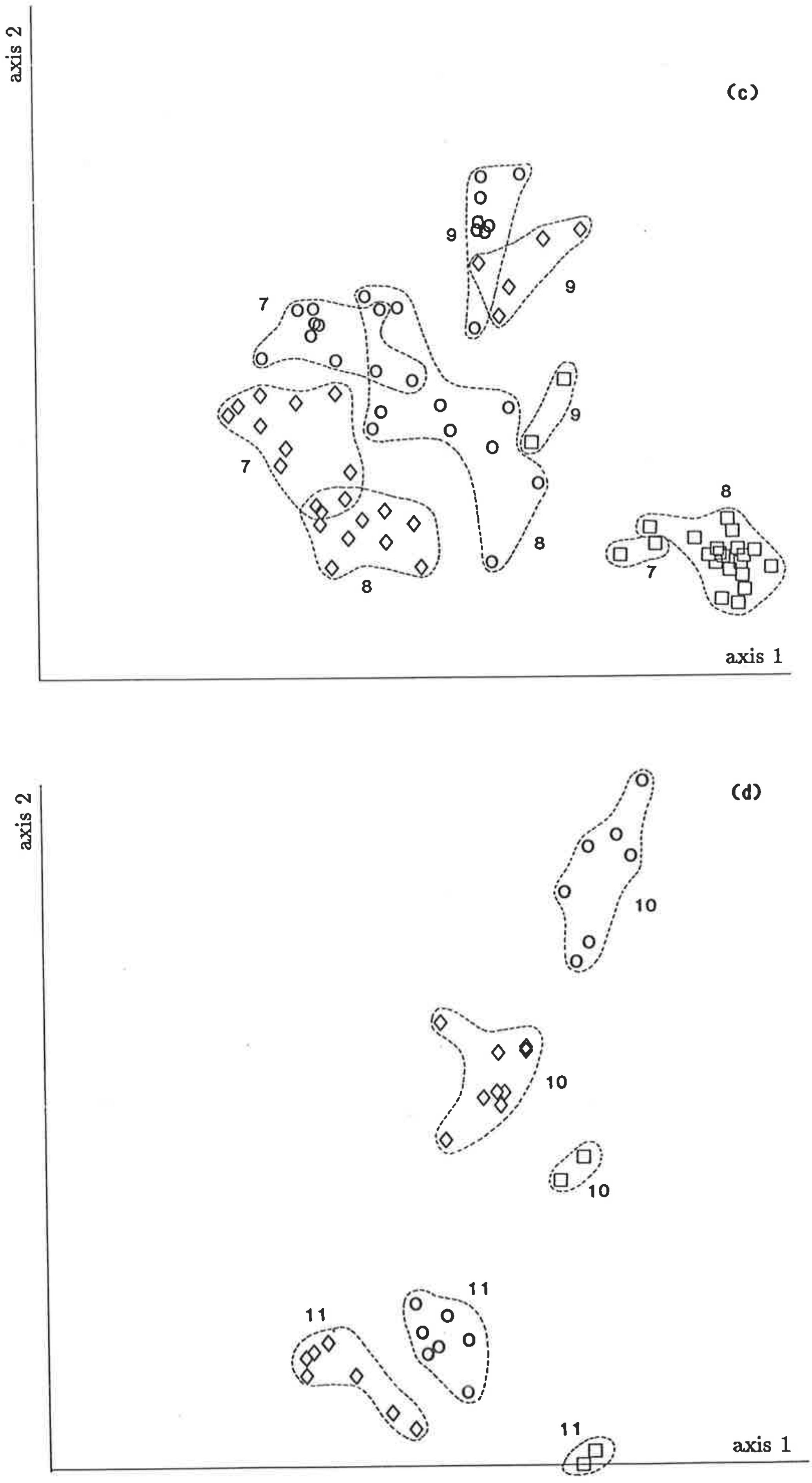


Figure 5.6 continued

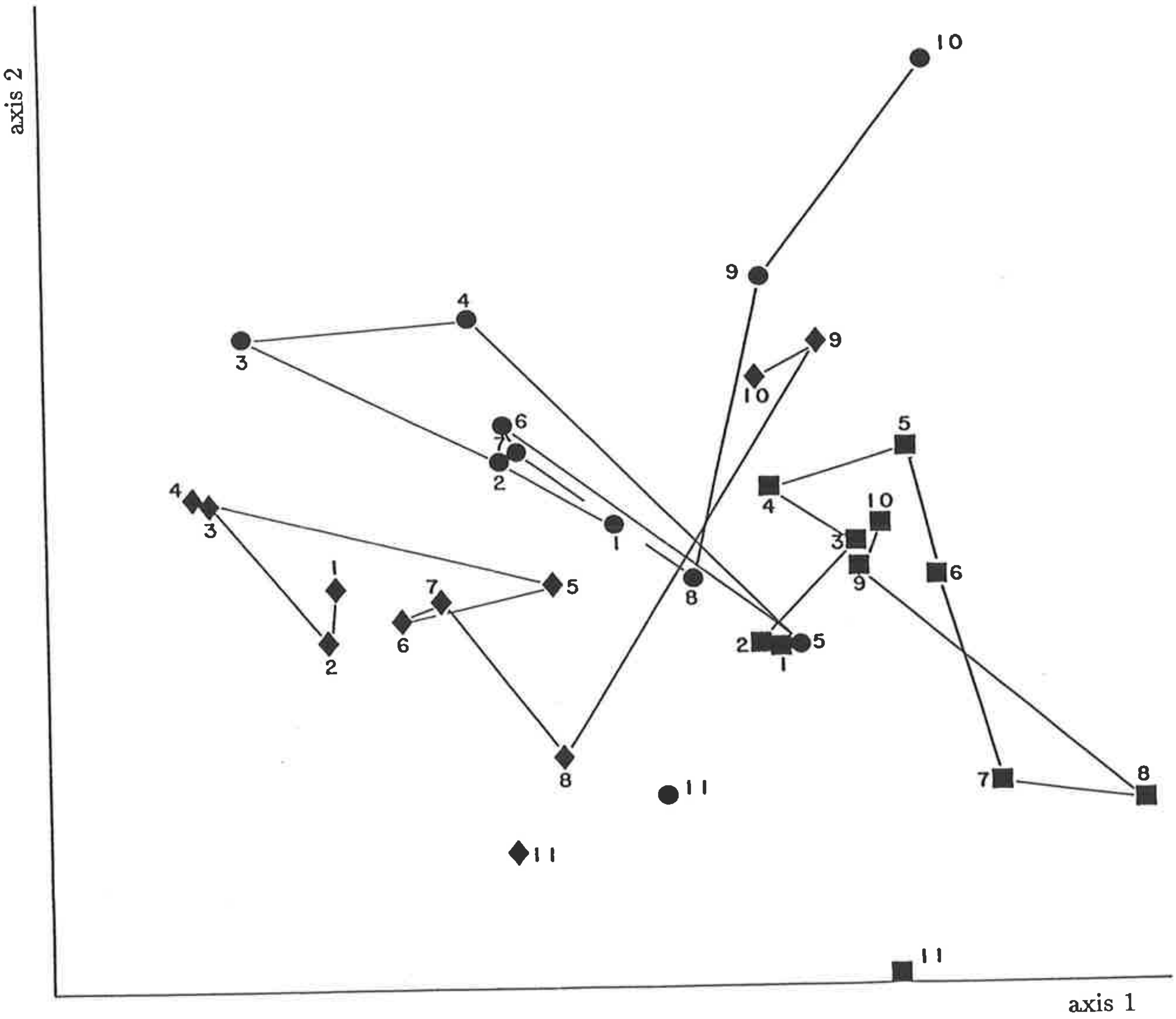


Figure 5.7 Detrended correspondence analysis ordination of initial (■), final ungrazed (◆), and final grazed (●) samples from the enclosures of all experiments (1-11) using phytoplankton frequency. The mean vectors of each treatment in each experiment are joined sequentially.

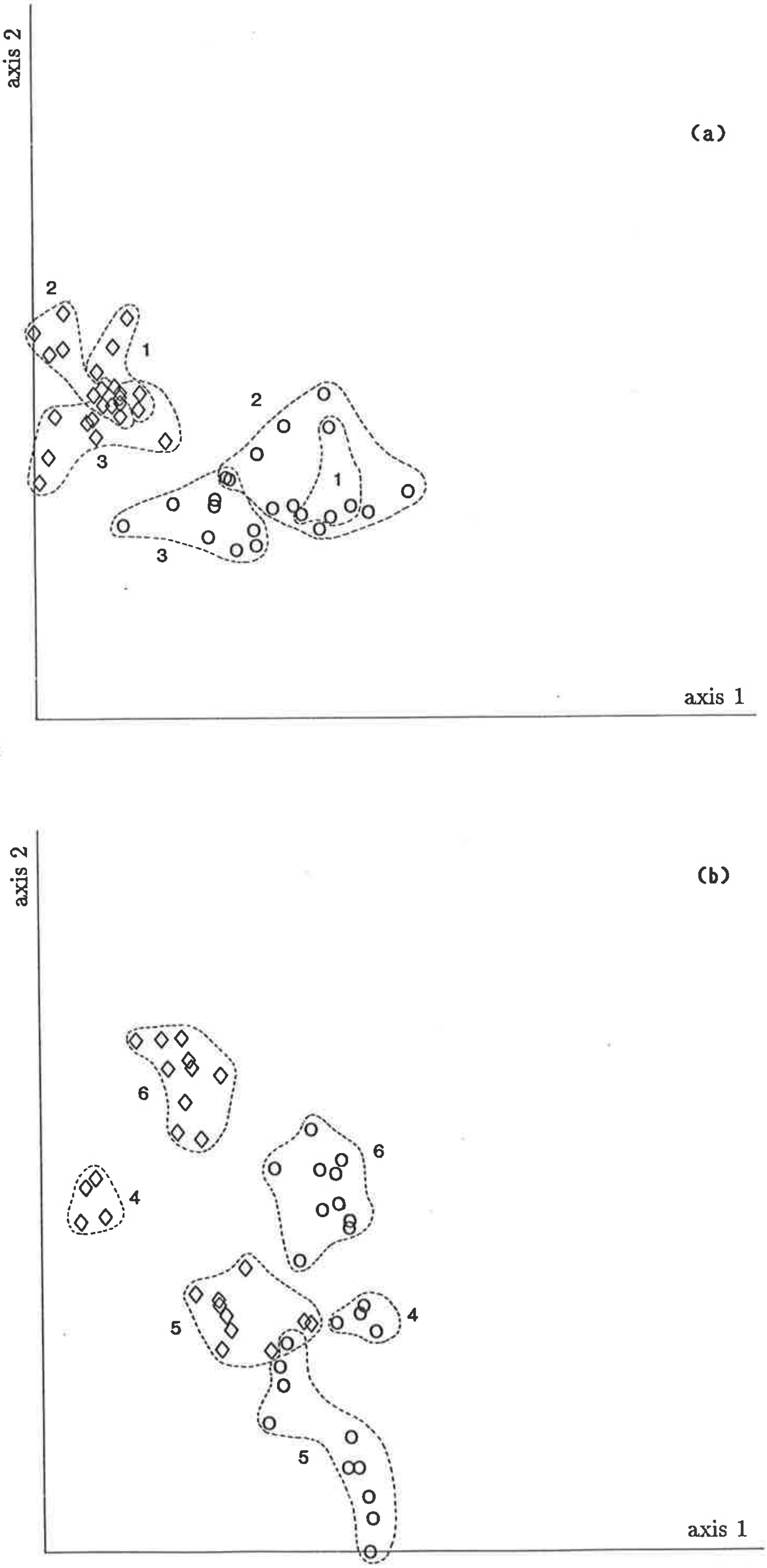


Figure 5.8 Detrended correspondence analysis ordination of final ungrazed (◇) and final grazed (O) samples from the enclosures of all experiments (1-11) using phytoplankton frequency. Groups of experiments are plotted separately (a-d) to facilitate interpretation and samples from each treatment are grouped in each experiment.

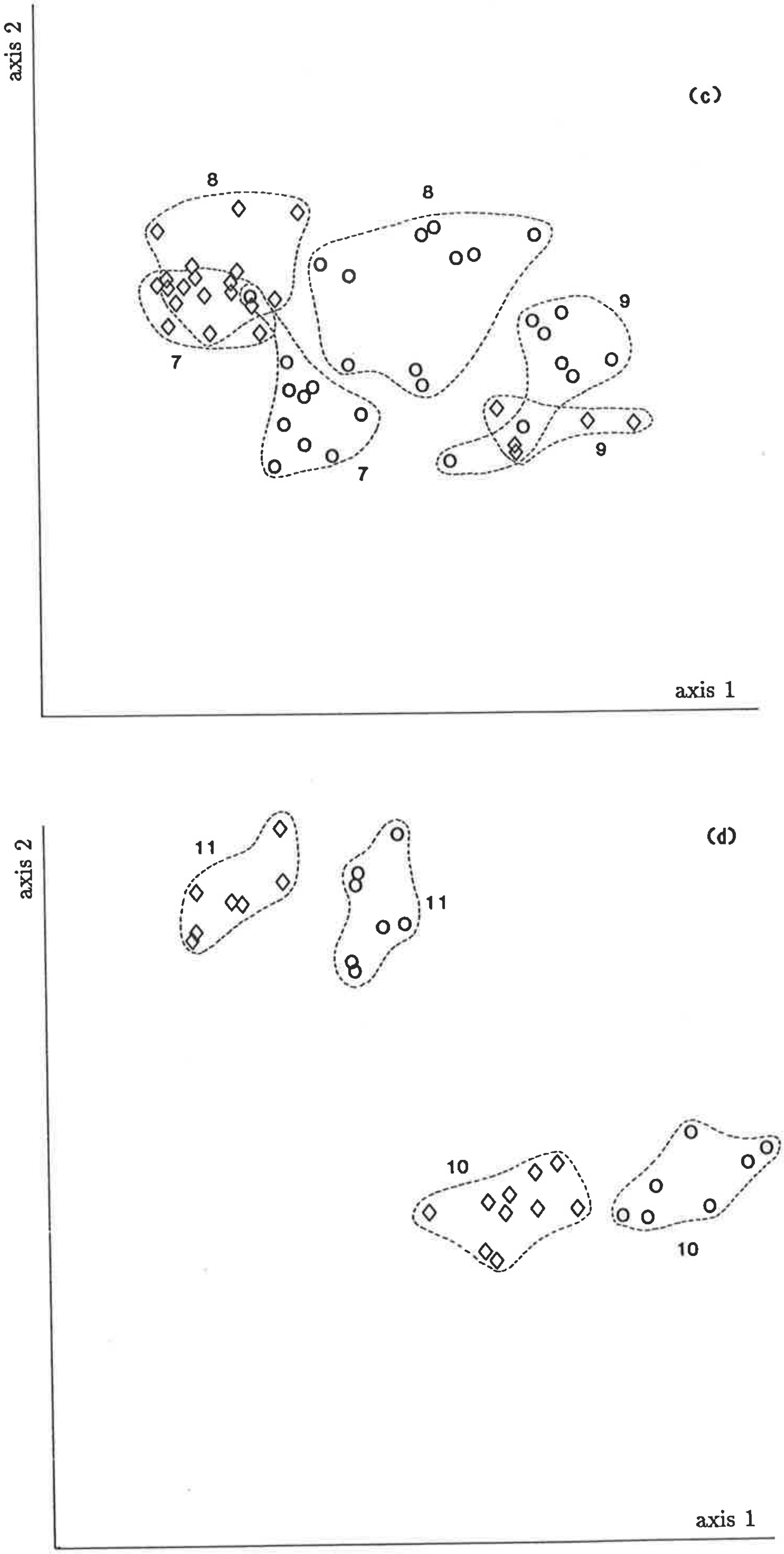


Figure 5.8 continued

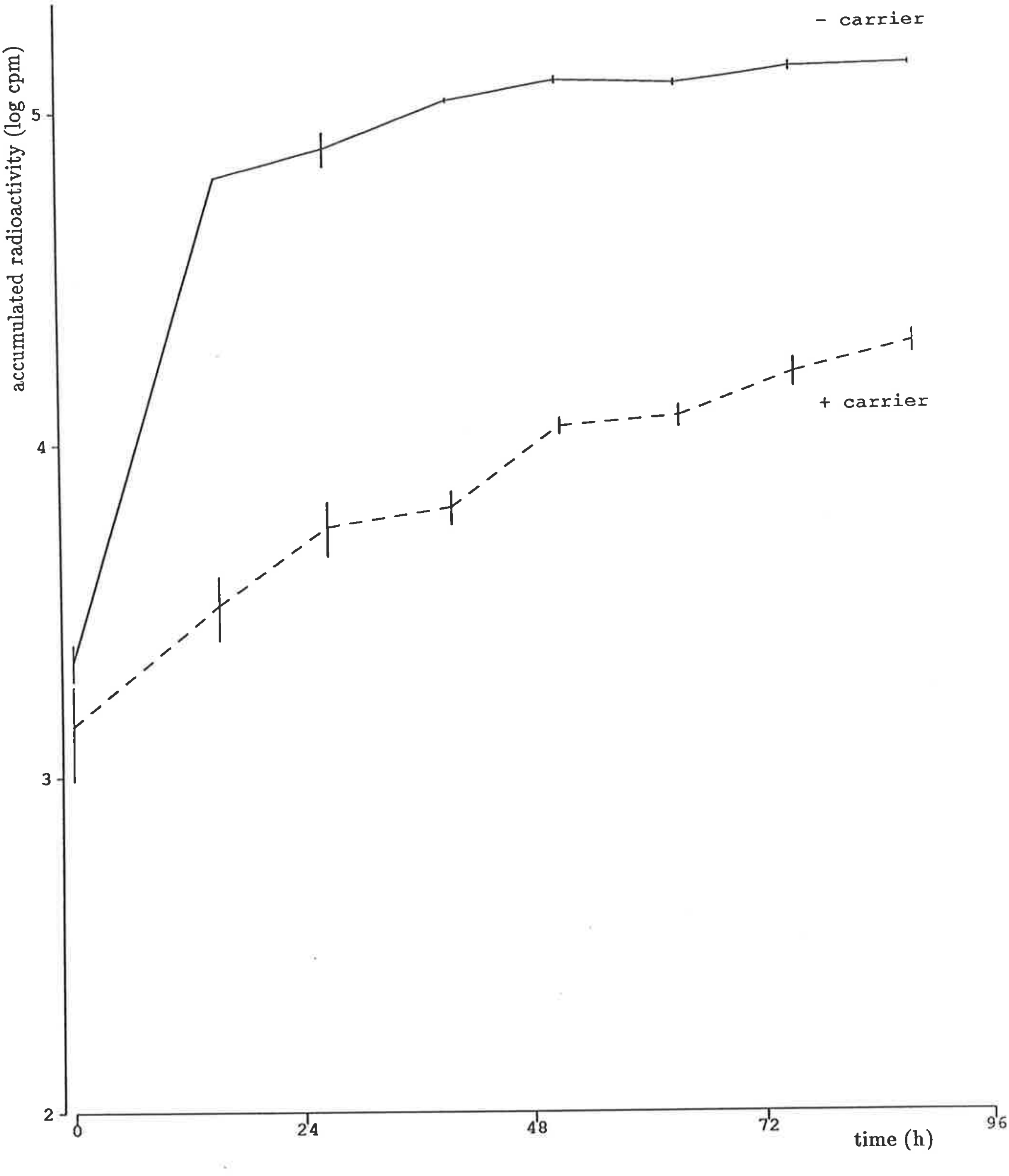


Figure 6.1 Time series of mean (±se) radioactivity (log cpm) accumulated by Mt Bold Reservoir phytoplankton during incubation with [broken line] and without [solid line] a carrier. See text for incubation conditions.

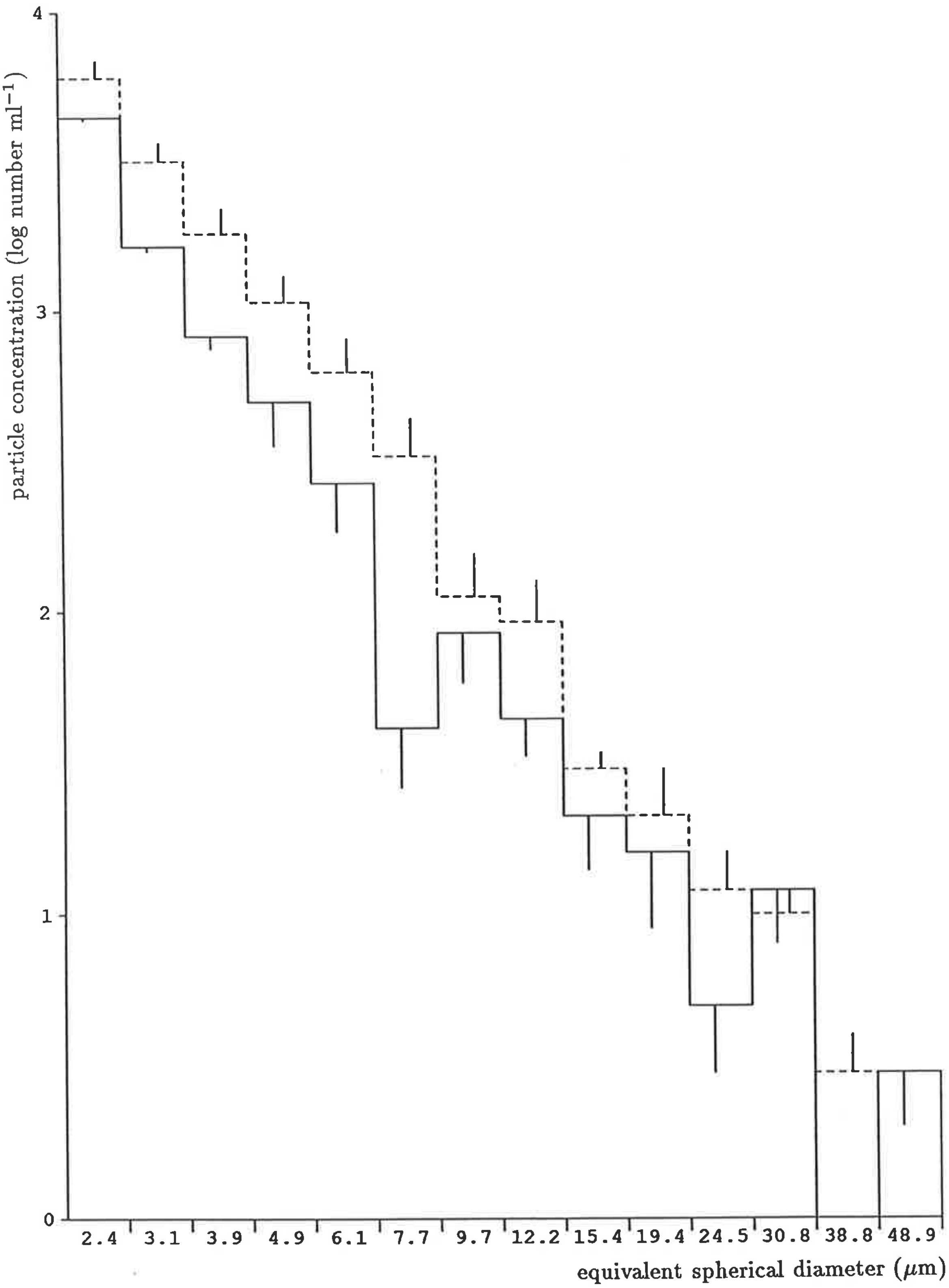


Figure 6.2a Particle size frequency distribution after 26 h incubation with [broken line] and without [solid line] a carrier. Mean ($\pm$se) particle concentrations (log number ml^{-1}) within equivalent spherical diameter (μm) size categories are shown.

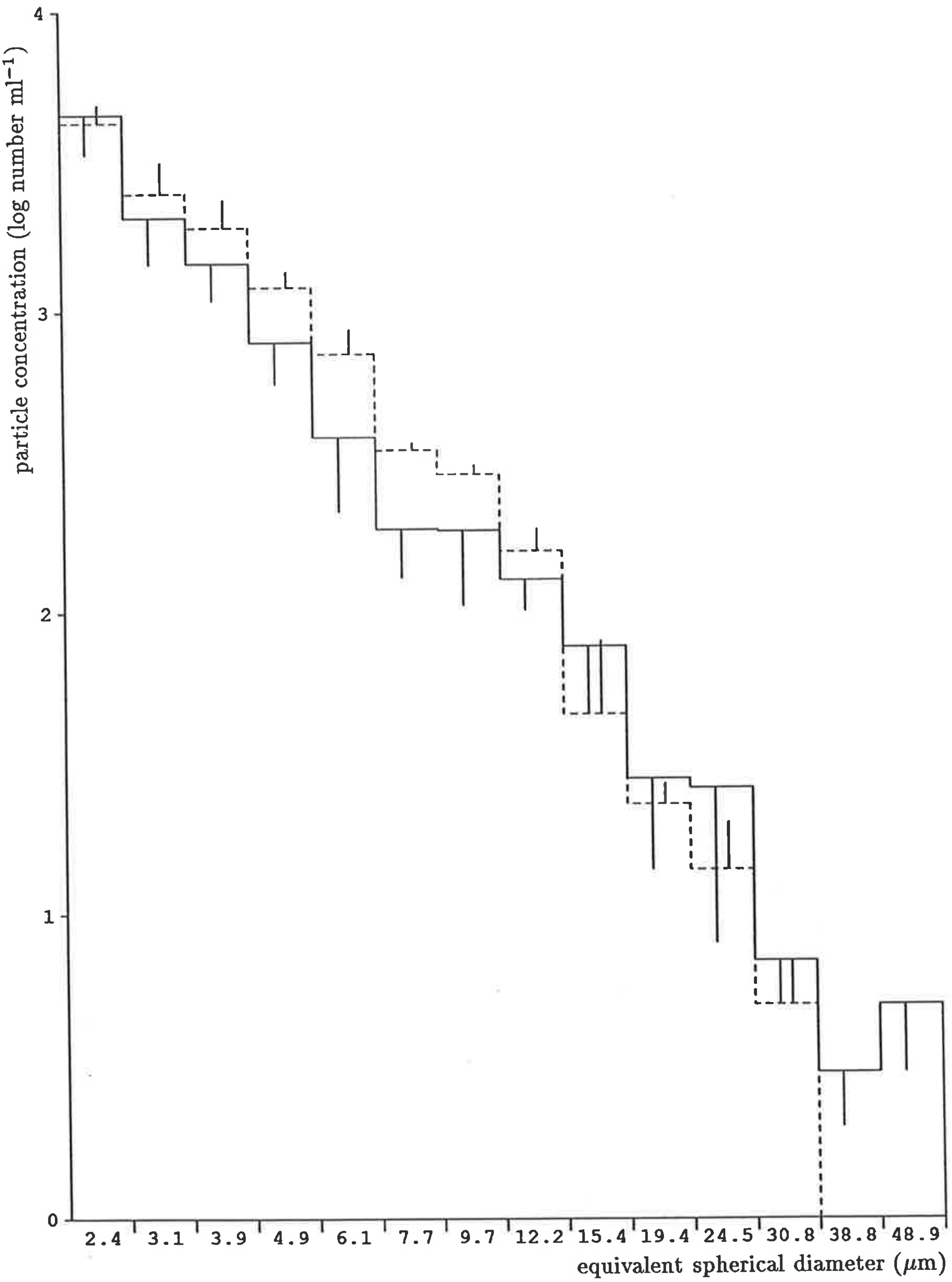


Figure 6.2b Particle size frequency distribution after 76 h incubation with [broken line] and without [solid line] a carrier. Mean (±se) particle concentrations (log number ml^{-1}) within equivalent spherical diameter (μm) size categories are shown.

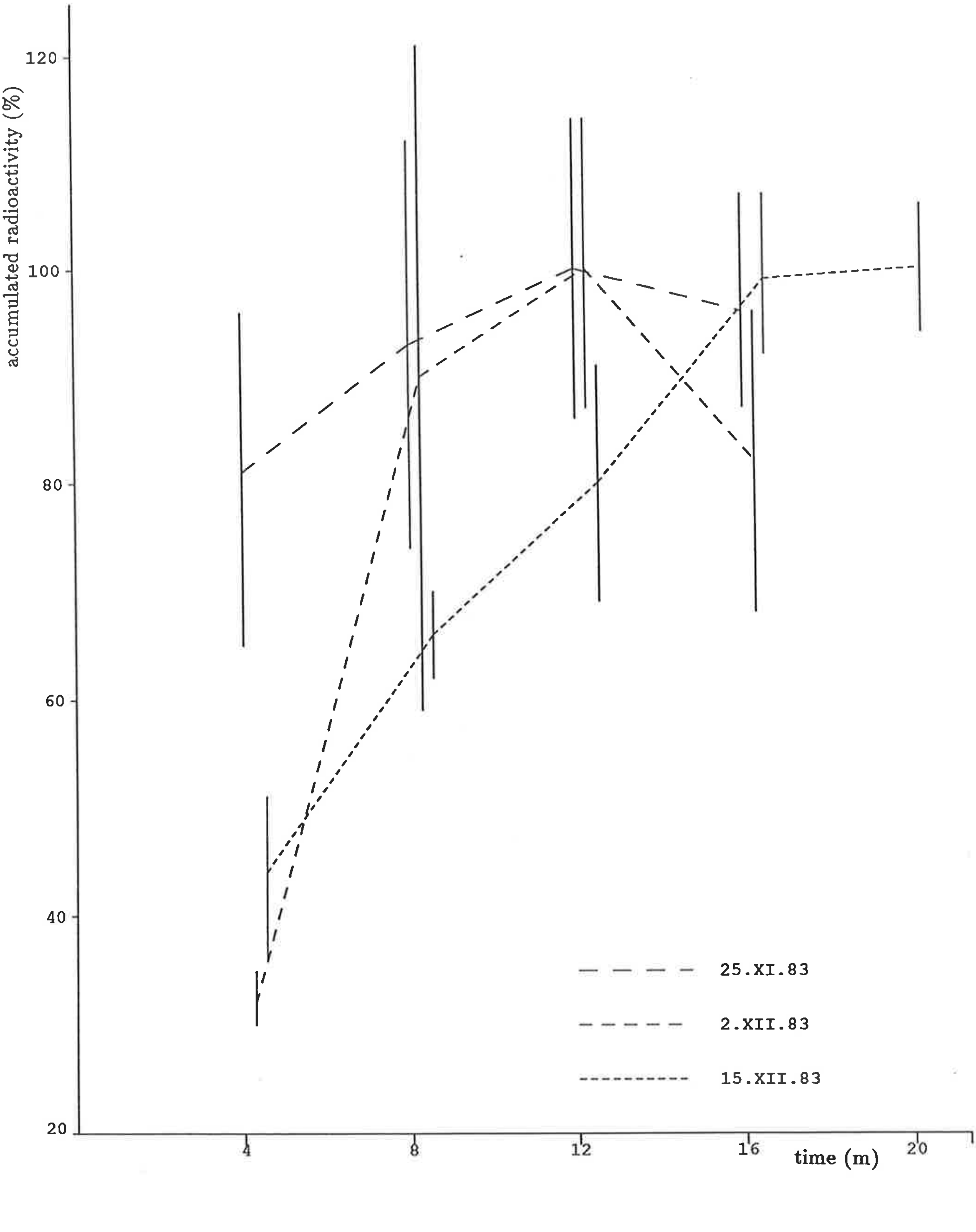


Figure 6.3 Time series of mean (±se) radioactivity accumulated by Mt Bold Reservoir zooplankton community on three occasions. Radioactivity is expressed as a percentage of the maximum mean on each date. Experiments are offset for clarity.

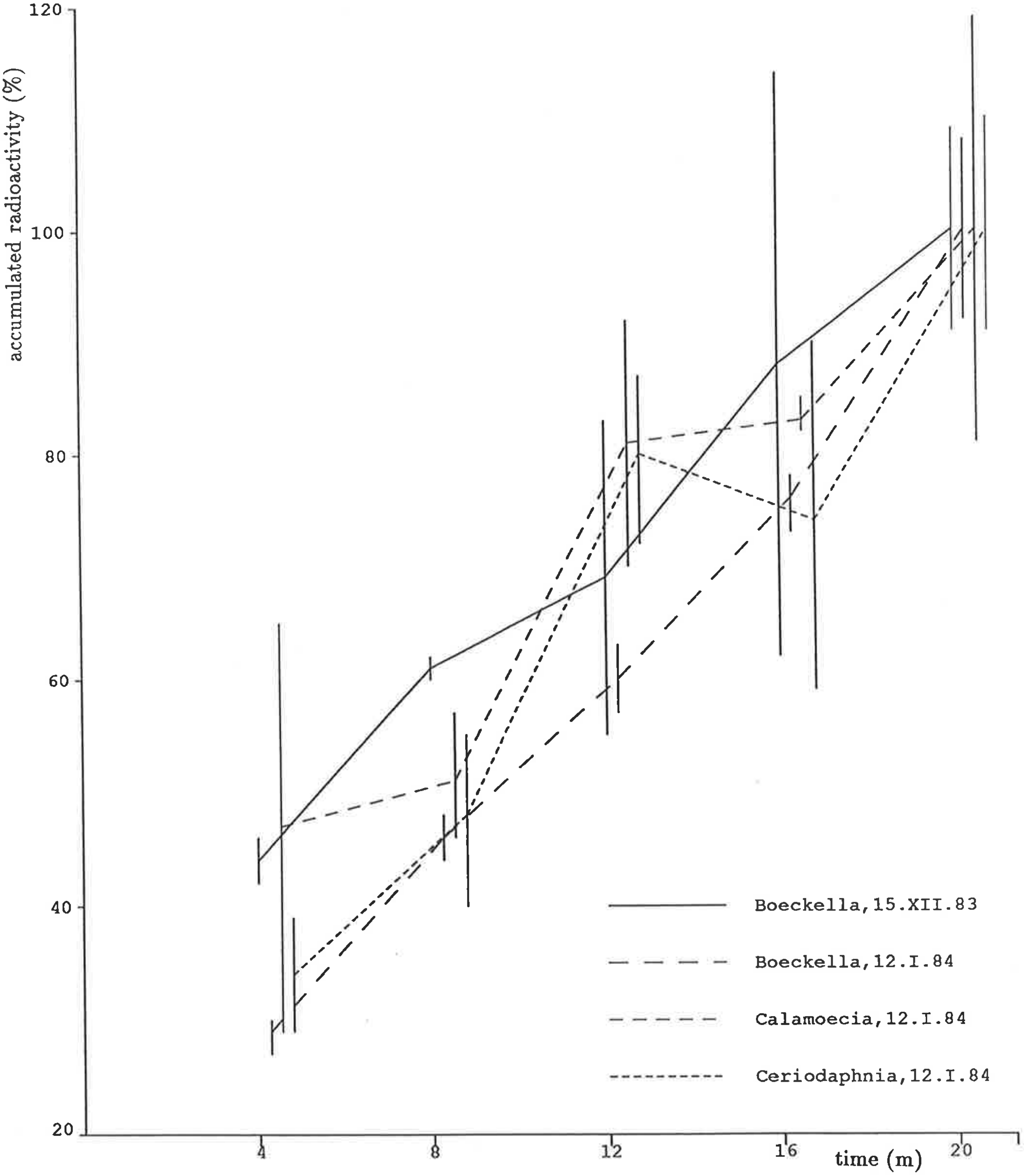


Figure 6.4 Time series of mean (±se) radioactivity accumulated by specific Mt Bold Reservoir zooplankton taxa on two occasions. Radioactivity is expressed as a percentage of the maximum mean on each date. Taxa are offset for clarity.

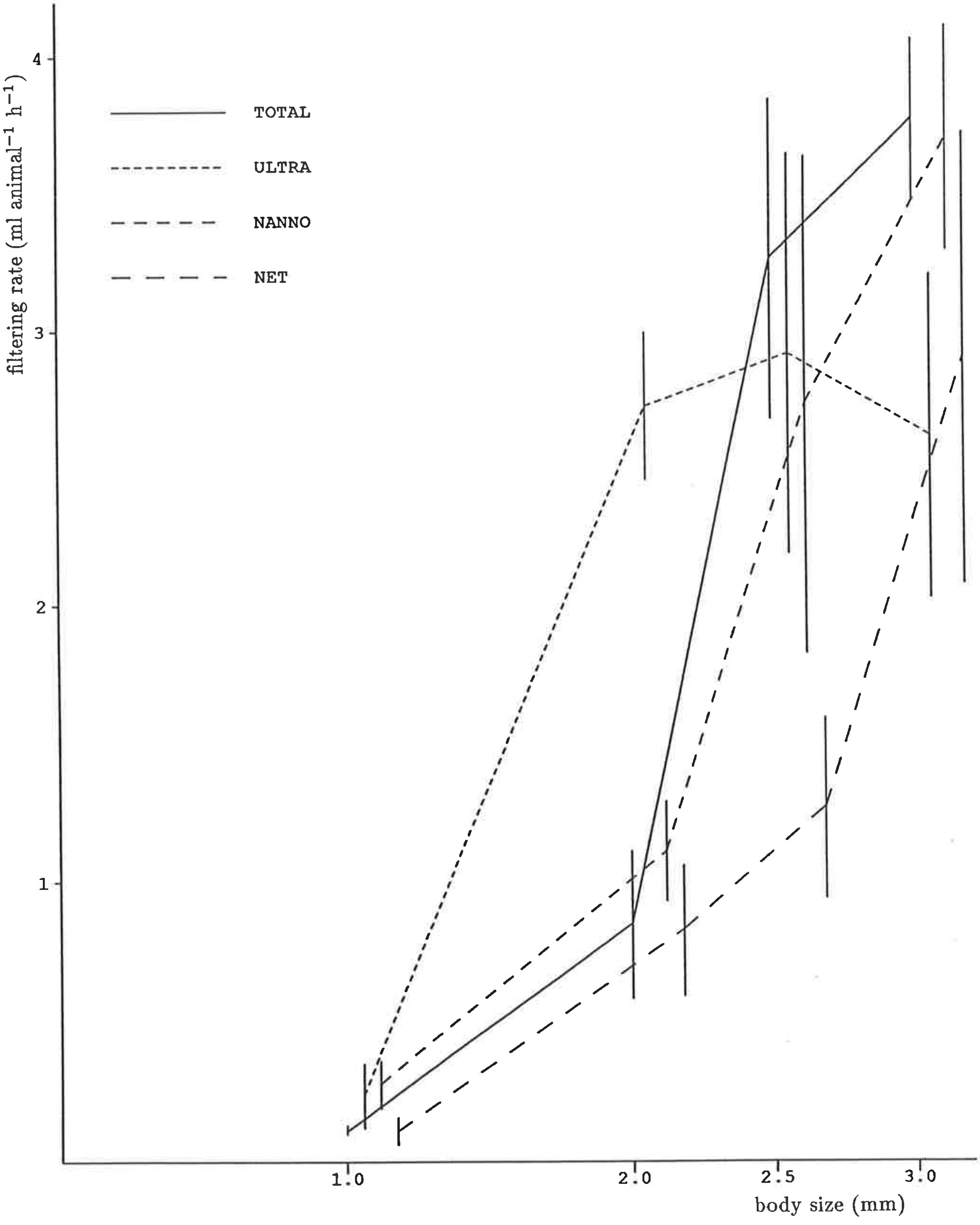


Figure 6.5 Mean (±se) filtering rate (ml animal^{-1} h^{-1}) of four size classes (mm) of *Daphnia carinata* on four food types. See text for definition of food types which are offset for clarity.

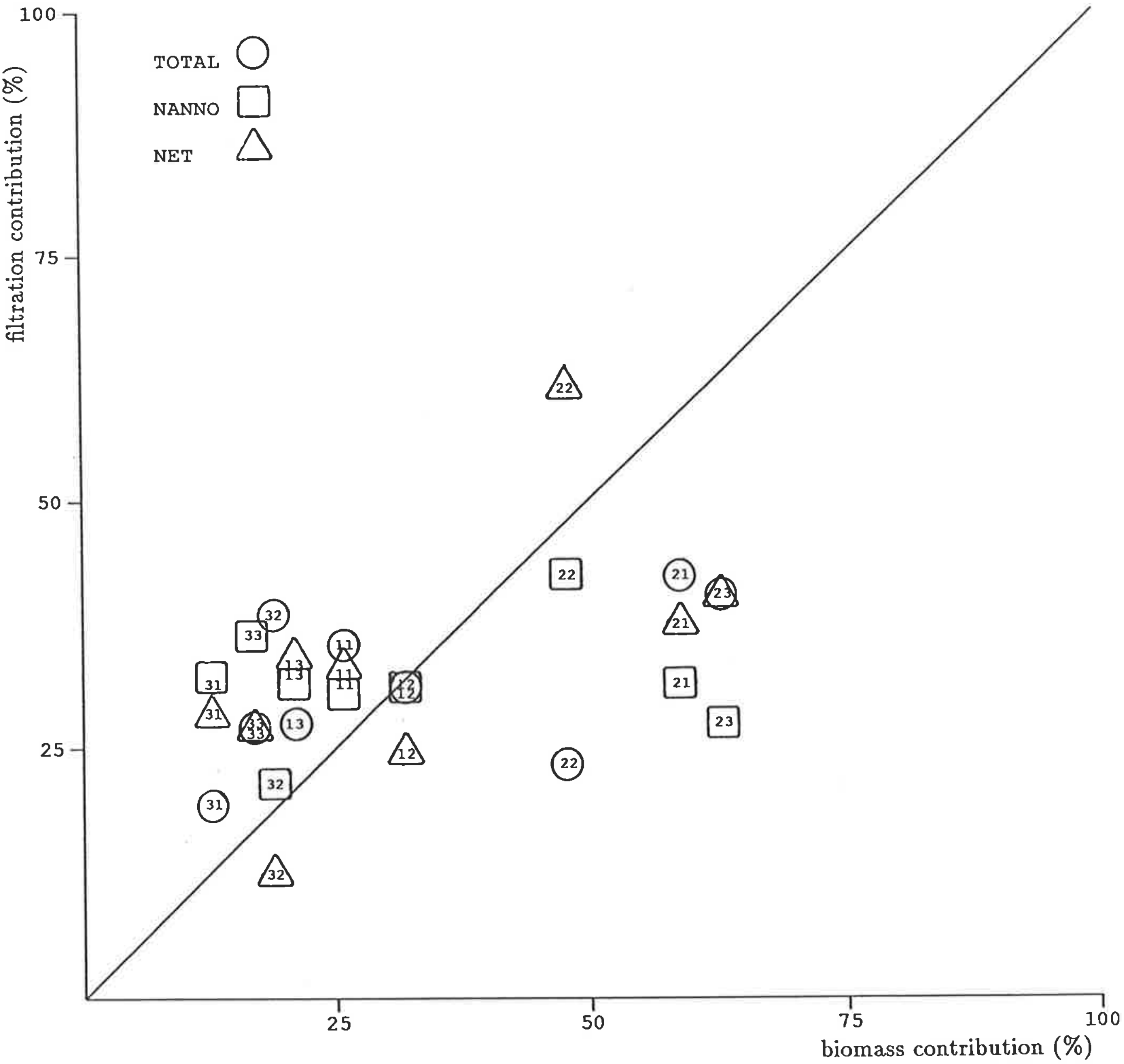


Figure 6.6 Percent contribution of specific zooplankton taxa to total community biomass [X axis] and total community filtration rate [Y axis]. The contributions of *Boeckella*, *Calamoecia*, and *Ceriodaphnia* are shown for three food types in three experiments. See Table 6.7 for key to taxa and dates.

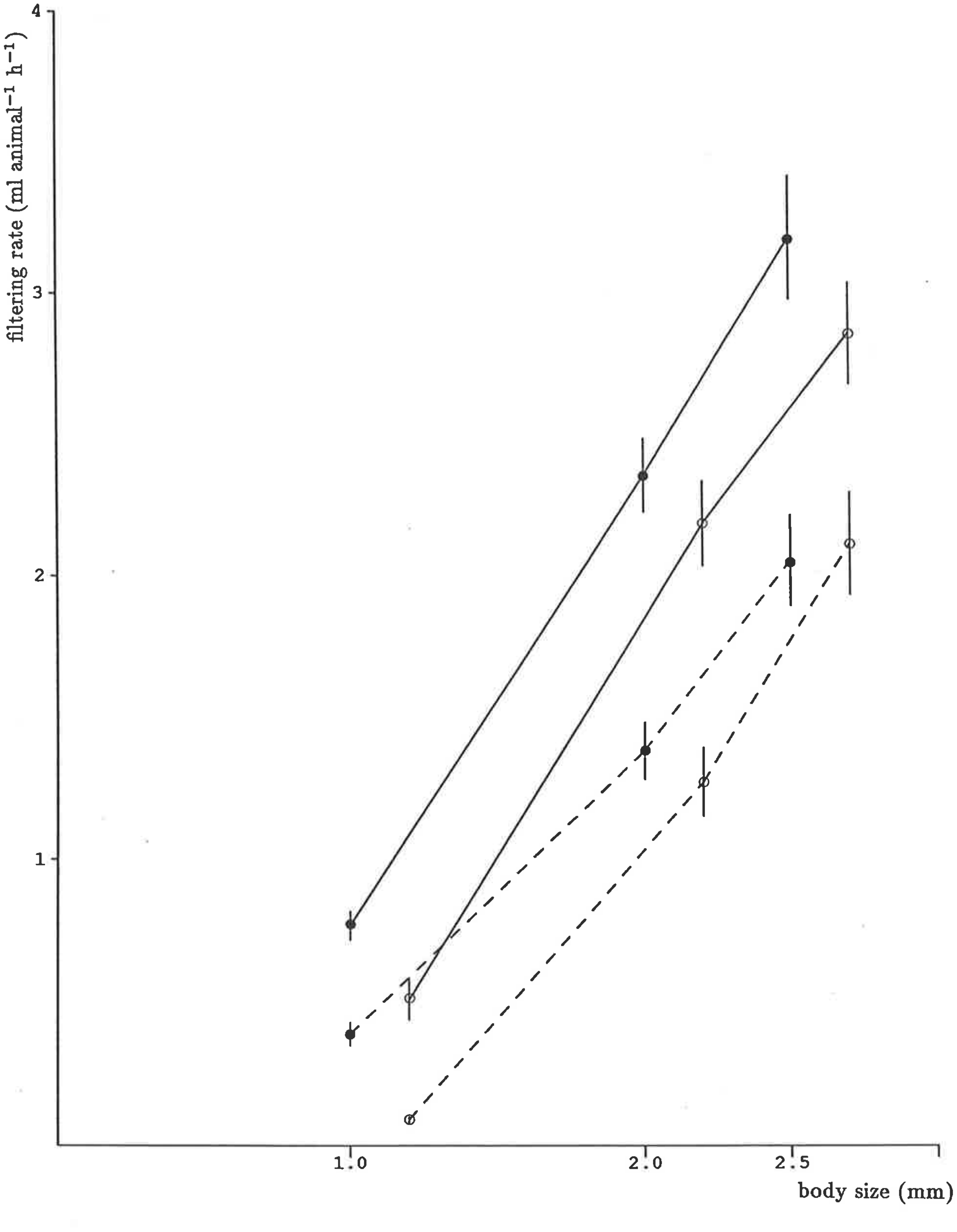


Figure 6.7 Mean (±se) filtering rate (ml animal^{-1} h^{-1}) of three size classes (mm) of *Daphnia carinata* in clear [solid line] or turbid [broken line] water using *Ankistrodesmus* [closed symbol] or *Staurastrum* [open symbol] food tracer. Food tracers are offset for clarity.

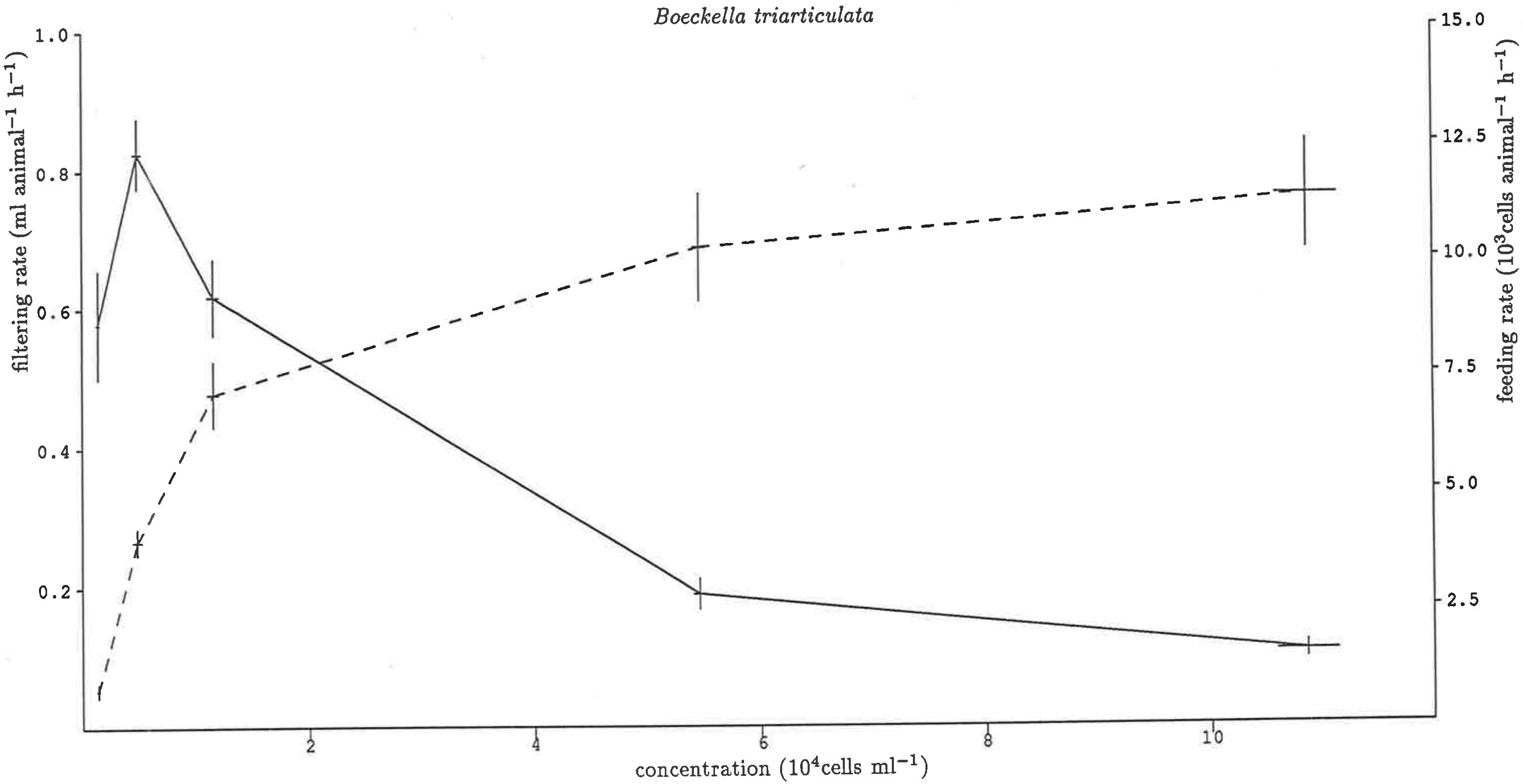


Figure 6.8a Mean (±se) filtering rate (ml animal^{-1} h^{-1}) [solid line] and feeding rate (10^3cells animal^{-1} h^{-1}) [broken line] of *Boeckella triarticulata* on a range (mean±se) of *Ankistrodesmus* concentrations (10^4cells ml^{-1}).

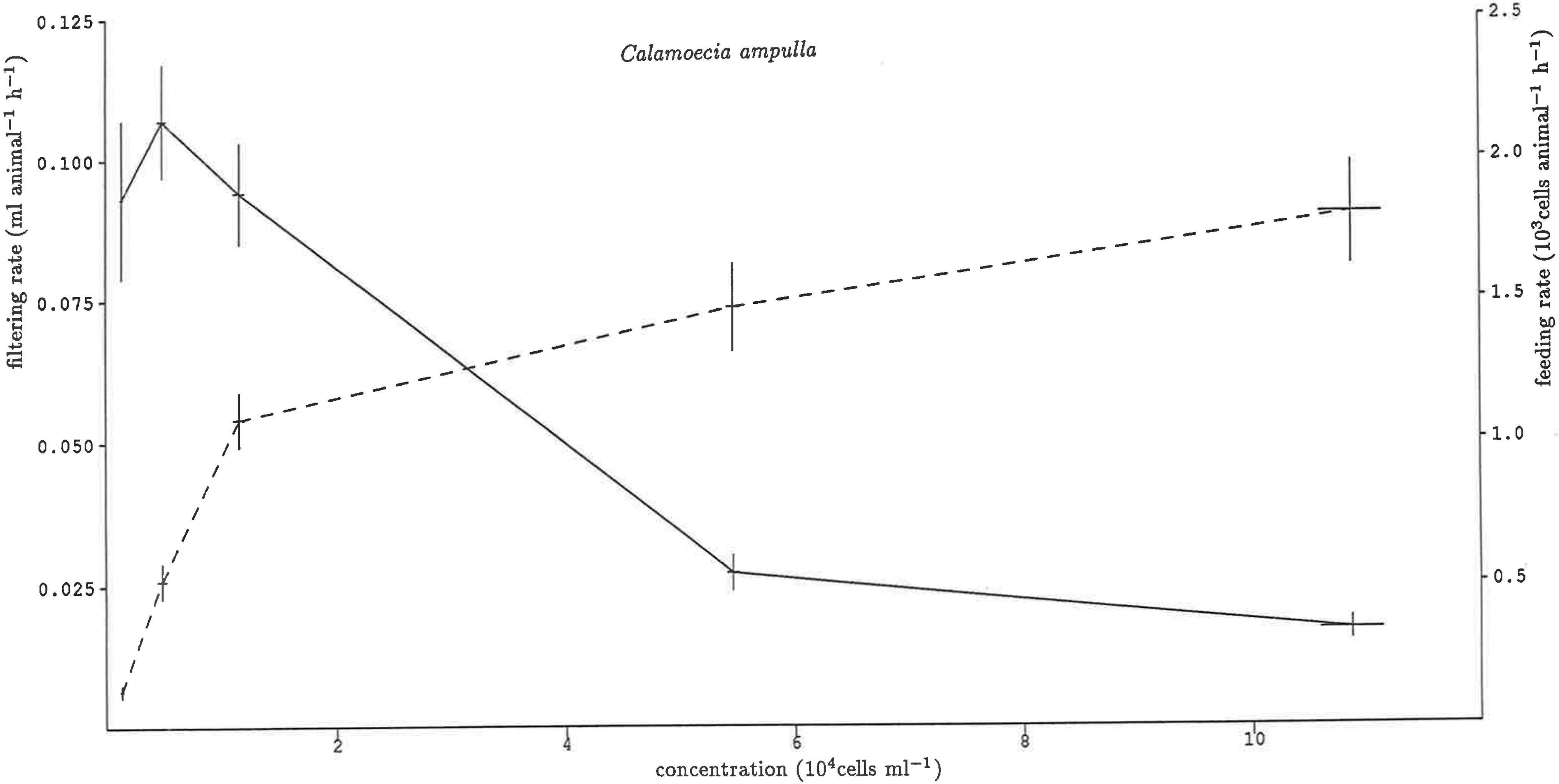


Figure 6.8b Mean (±se) filtering rate (ml animal^{-1} h^{-1}) [solid line] and feeding rate (10^3cells animal^{-1} h^{-1}) [broken line] of *Calamoecia ampulla* on a range (mean±se) of *Ankistrodesmus* concentrations (10^4cells ml^{-1}).

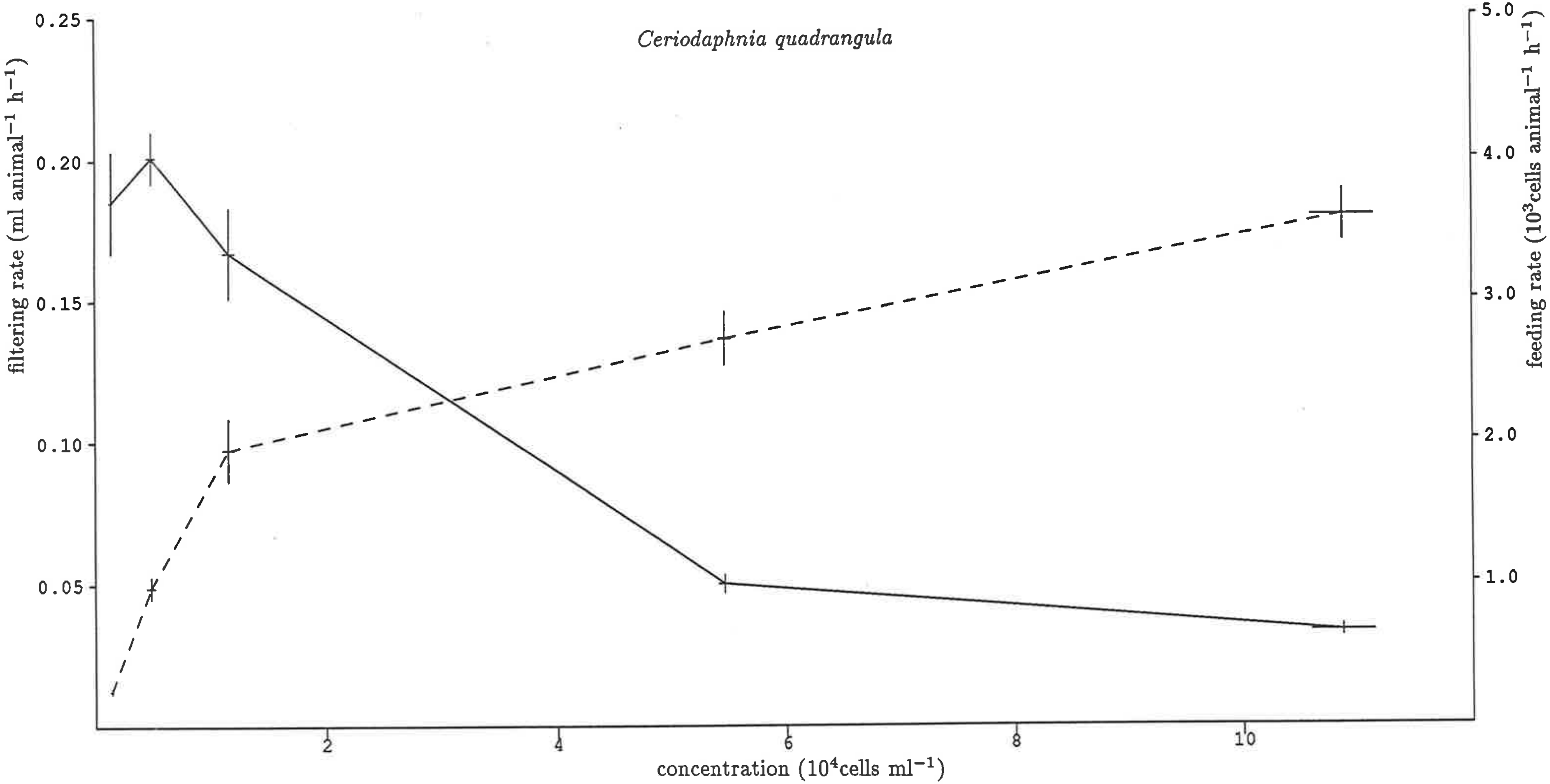


Figure 6.8c Mean (±se) filtering rate (ml animal^{-1} h^{-1}) [solid line] and feeding rate (10^{3}cells animal^{-1} h^{-1}) [broken line] of *Ceriodaphnia quadrangula* on a range (mean±se) of *Ankistrodesmus* concentrations (10^{4}cells ml^{-1}).

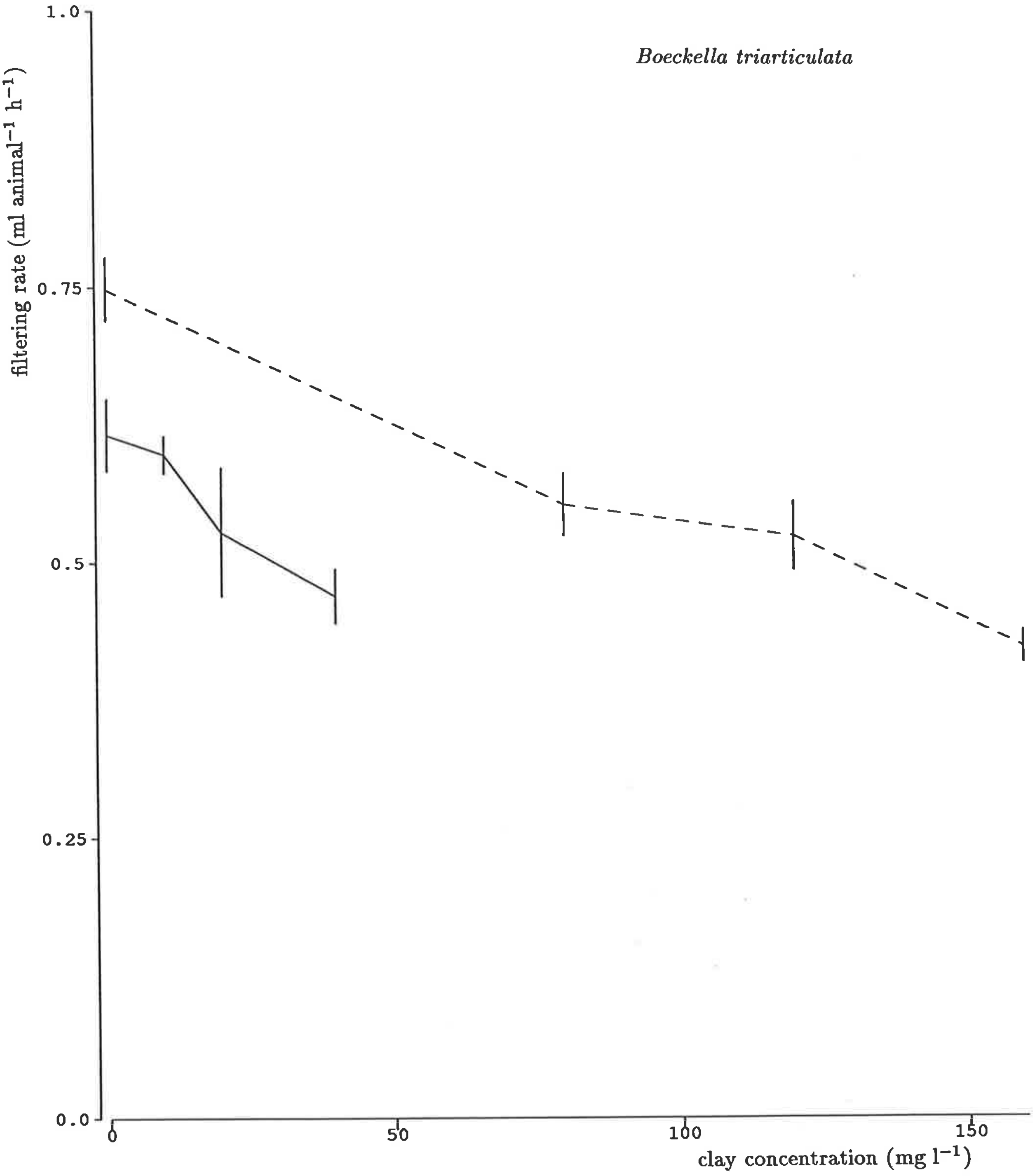


Figure 6.9a Mean (±se) filtering rate (ml animal^{-1} h^{-1}) of *Boeckella triarticulata* across a range of clay concentrations (mg l^{-1}). Two experiments were done to cover the range of clay concentrations.

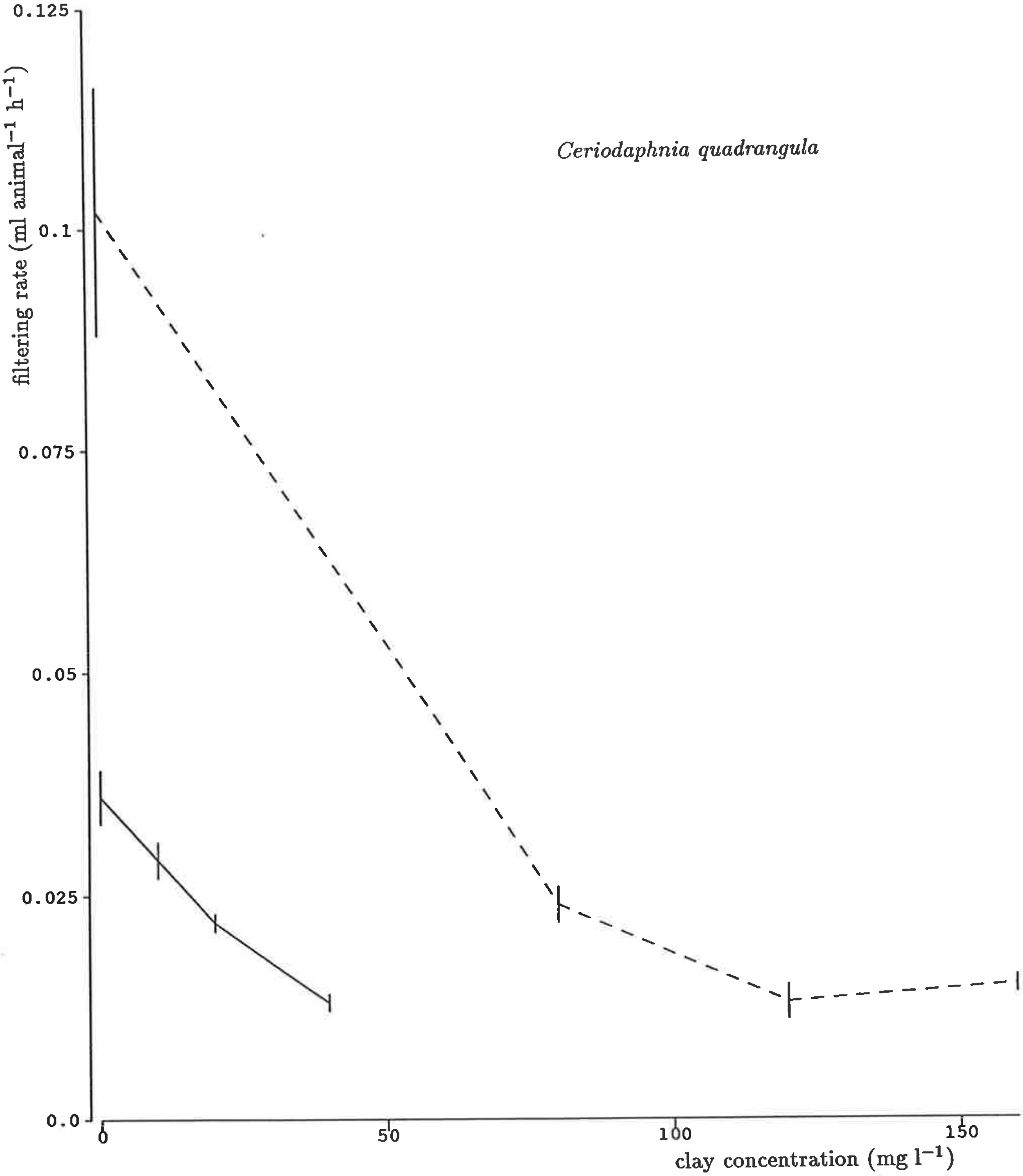


Figure 6.9b Mean (±se) filtering rate (ml animal^{-1} h^{-1}) of *Ceriodaphnia quadrangula* across a range of clay concentrations (mg l^{-1}). Two experiments were done to cover the range of clay concentrations.

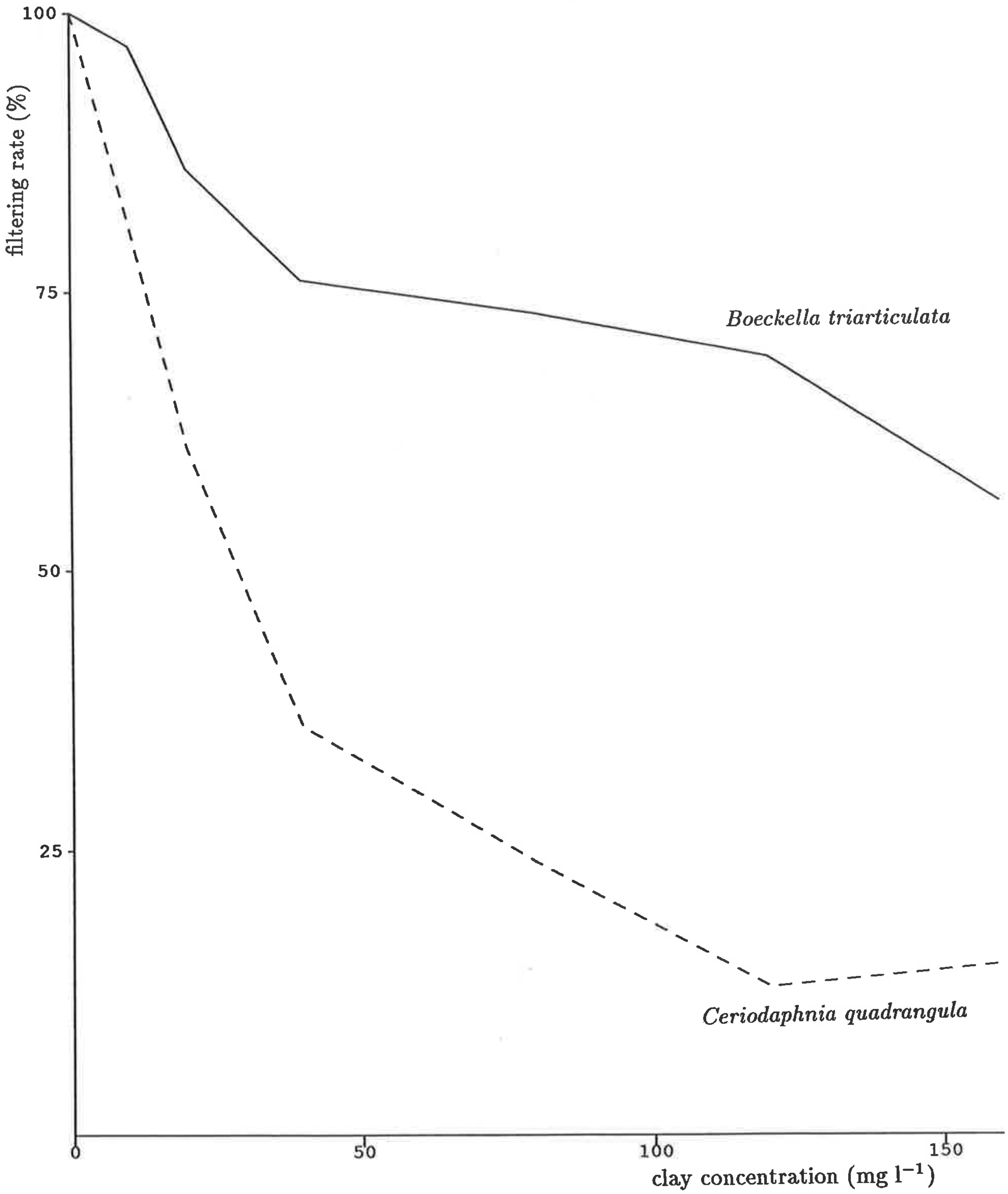


Figure 6.10 Mean filtering rates of *Boeckella triarticulata* [solid line] and *Ceriodaphnia quadrangula* [broken line], across the range of clay concentation, expressed as a percentage of the control.

TABLES

YEAR	J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
1981	39	9	76	6	66	219	160	166	48	32	39	22	882
1982	23	7	59	67	63	75	39	31	35	23	6	10	438
1983	15	3	92	110	79	43	121	119	86	60	26	20	774

Table 3.1 Mt Lofty Ranges monthly rainfall (mm).

DAY NUMBERS	K_s	K_q	r^2	n
74-81	0.014	1.892	0.976	3
102-114	0.021	1.635	0.911	3
123-130	0.033	1.648	0.983	3
175-190	0.012	2.456	0.996	3

Table 3.2 Estimates of chlorophyll-specific attenuation [K_s] (ln (mg chl *a*)$^{-1}$ m^2) and background attenuation [K_q] (ln m^{-1}) during phytoplankton blooms.

DAY NUMBERS	REGRESSION EQUATIONS	r^2	n	PHYTOPLANKTON
70-81	$C = 2.99\times10^{-6}\ V - 2.43$	0.91	3	Melosira
98-105	$C = 5.67\times10^{-6}\ V + 0.08$	1.00	3	Carteria, Microcystis
165-183	$C = 2.93\times10^{-6}\ V + 2.63$	0.98	3	Volvox, Microcystis
422-429	$C = 1.17\times10^{-5}\ V + 0.33$	----	2	Carteria, Cyclotella
443-469	$C = 4.41\times10^{-7}\ V + 1.39$	1.00	5	Volvox
533-547	$C = 1.15\times10^{-6}\ V + 1.29$	1.00	3	Ceratium

Table 3.3 Relationships between chlorophyll *a* concentration [C] (μg l^{-1}) and total phytoplankton cell volume [V] (μm^3 ml^{-1}) during phytoplankton blooms.

	CELL					COLONY				
	n	GALD µm	SGALD µm	VOLUME μm^3	SA/VOL	n	GALD µm	SGALD µm	VOLUME μm^3	SA/VOL
CHLOROPHYTA										
[ANK] Ankistrodesmus	10	16.3 (0.3)	1.9 (0.1)	16 (2)	3.45 (0.43)	--	---	---	---	---
[CAR] Carteria	98	14.5 (0.2)	spherical	1681 (63)	0.42 (0.01)	--	---	---	---	---
[CHY] Chlamydomonas	35	20.5 (0.6)	17.3 (0.7)	3824 (523)	0.34 (0.01)	--	---	---	---	---
[CLS] Closteriopsis	20	77.3 (1.1)	3.9 (0.1)	315 (31)	1.60 (0.06)	--	---	---	---	---
[COL] Coelastrum	--	---	---	---	---	10	17.2 (0.3)	spherical	3157 (1127)	0.35 (0.02)
[OOS] Oocystis	50	12.6 (0.3)	spherical	1179 (108)	0.50 (0.02)	25	25.7 (0.4)	spherical	9595 (1057)	0.24 (0.01)
[SCN] Scenedesmus	--	---	---	---	---	10	11.5 (0.2)	8.0 (0)	70 (18)	2.53 (0.27)
[SCH] Schroederia	15	17.7 (0.3)	3.7 (0.3)	46 (7)	1.86 (0.15)	--	---	---	---	---
[SPH] Sphaerocystis	34	5.3 (0.1)	spherical	87 (10)	1.17 (0.03)	32	24.8 (0.6)	spherical	9542 (1347)	0.26 (0.01)
[STR] Staurastrum	17	106.2 (0.6)	93.1 (1.5)	11497 (679)	0.60 (0.01)	--	---	---	---	---
[VOL] Volvox	--	---	---	---	---	--	1350	spherical	28420000	0.403
CHRYSOPHYTA										
Chrysophyceae										
[MAL] Mallomonas	10	20.7 (0.2)	14.0 (0.6)	2143 (288)	0.36 (0.02)	--	---	---	---	---
[OCH] Ochromonas	54	9.7 (1.3)	4.7 (0.1)	53 (2)	1.68 (0.02)	--	---	---	---	---
Bacillariophyceae										
[CY1] Cyclotella 1	20	6.0 (0.2)	4.0 (0)	75 (2)	1.36 (0.07)	--	---	---	---	---
[CY2] Cyclotella 2	110	18.4 (0.5)	15.7 (0.3)	4510 (316)	0.37 (0.01)	--	---	---	---	---
[ML1] Melosira 1	44	10.5 (0.2)	3.0 (0)	75 (1)	1.53 (0.01)		chain	=cell	chain	=cell
[ML2] Melosira 2	46	7.9 (0.1)	8.0 (0.1)	400 (3)	0.75 (0.01)		chain	=cell	chain	=cell
[ML3] Melosira 3	40	22.5 (0.1)	18.7 (0.3)	6365 (405)	0.31 (0.01)		chain	=cell	chain	=cell
CRYPTOPHYTA										
[CR1] Cryptomonas 1	59	14.1 (0.2)	8.0 (0.1)	236 (6)	1.00 (0.01)	--	---	---	---	---
[CR2] Cryptomonas 2	59	20.3 (0.4)	12.3 (0.2)	1691 (90)	0.40 (0.01)	--	---	---	---	---
EUGLENOPHYTA										
[TRC] Trachelomonas	10	21.0 (0.2)	18.3 (0.9)	3745 (546)	0.31 (0.02)	--	---	---	---	---
PYRROPHYTA										
[CER] Ceratium	20	250.7 (1.4)	91.8 (4.9)	86669 (3502)	0.23 (0.01)	--	---	---	---	---
CYANOBACTERIA										
[ANA] Anabaena	15	7.4 (0.1)	spherical	224 (44)	0.82 (0.01)		chain	=cell	chain	=cell
[CYN] Cyanarcus	10	5.0 (0)	2.5 (0)	99 (0)	1.25 (0)	--	---	---	---	---
[MIC] Microcystis	30	4.3 (0.1)	spherical	45 (5)	1.42 (0.03)		chain	=cell	chain	=cell
[UBG] Unidentified	31	3.9 (0.1)	spherical	34 (3)	1.56 (0.04)	--	---	---	---	---
Unidentified Cells										
[LSC]	12	3.6 (0.1)	spherical	26 (3)	1.71 (0.07)	12	17.5 (0.2)	spherical	2957 (108)	0.35 (0.02)
[LGS]	30	7.7 (0.1)	spherical	245 (9)	0.78 (0.01)	--	---	---	---	---
[SMS]	31	4.9 (0.1)	spherical	62 (2)	1.23 (0.02)	--	---	---	---	---

Table 3.4 Mt Bold Reservoir phytoplankton cell and/or colony size and surface area : volume estimates. Taxa codes are bracketed.

(a) CV

TAXA	81/82	82/83
Closteriopsis	141.8	224.2
Melosira 3	151.5	527.1
Ochromonas	166.4	87.5
Trachelomonas	172.3	-----
Ankistrodesmus	176.3	109.7
Oocystis	184.3	207.1
Schroederia	194.8	221.4
Mallomonas	199.2	-----
Cryptomonas 1	224.5	200.4
Cyclotella 2	228.9	160.7
Cyanarcus	233.9	257.2
Scenedesmus	256.2	-----
Microcystis	303.1	152.4
Sphaerocystis	311.0	184.5
Carteria	315.8	439.7
Cryptomonas 2	343.9	100.2
Anabaena	356.5	-----
Coelastrum	367.0	-----
Volvox	424.8	579.0
Melosira 1	611.0	-----
Chlamydomonas	654.6	181.1
LGS	-----	130.0
SMS	-----	138.3
Staurastrum	-----	211.3
LSC	-----	212.0
Cyclotella 1	-----	286.1
UBG	-----	435.9
Melosira 2	-----	439.8
Ceratium	-----	556.8

(b) Skewness

TAXA	81/82	82/83
Closteriopsis	1.52	2.74
Melosira 3	1.96	5.92
Trachelomonas	2.20	----
Mallomonas	2.32	----
Ankistrodesmus	2.46	1.81
Scenedesmus	2.50	----
Oocystis	2.71	3.97
Ochromonas	2.88	1.82
Cyanarcus	3.51	2.65
Schroederia	3.69	4.59
Carteria	3.70	5.31
Cryptomonas 1	3.89	2.93
Cyclotella 2	3.89	1.57
Cryptomonas 2	3.90	1.06
Coelastrum	4.73	----
Sphaerocystis	4.94	3.00
Microcystis	5.03	1.72
Anabaena	5.64	----
Volvox	6.08	6.35
Melosira 1	7.35	----
Chlamydomonas	7.76	2.29
LGS	----	2.43
SMS	----	3.04
Cyclotella 1	----	3.17
LSC	----	3.51
Staurastrum	----	4.23
Melosira 2	----	5.24
UBG	----	6.48
Ceratium	----	6.51

Table 3.5 (a) Coefficient of variation (%) and (b) Skewness of phytoplankton taxa frequency distributions during 1981/1982 and 1982/1983.

	ANK	CAR	CHY	CLS	COL	OOS	SCN	SCH	SPH	STR	VOL	MAL	OCH	CY1	CY2	ML1	ML2	ML3	CR1	CR2	TRC	CER	ANA	CYN	MIC	UBG	LSC	LGS	SMS
ANK						-	+												+										
CAR					+								++		+										+++				
CHY						+							+++		+++	++		+++	++				+	-	+++				
CLS	--							++	+++						+	-				+	+								
COL								+	+						+				-										
OOS				++					++						+++	+		++	+				+++	--					
SCN																			--										
SCH																				+	+				+				
SPH			++										-																
STR																													
VOL						-																							
MAL													++		++														
OCH		+			+						-				+++	++		+++	+++		--		+++	---					
CY1		-	+							-			-																
CY2	+++	+								+						+++		+++	++				++	---					
ML1																		+	+				+	-	+				
ML2						+																							
ML3			+																++				+++	---					
CR1			+++	++					+						+					+++			+++	-					
CR2		+				-							+		++														
TRC			-			--		-						--	+				-	+									
CER										+																			
ANA																								--	+				
CYN														-					-										
MIC			--	--					+				-	+	++					+	++								
UBG							+	+	+++	+			-	+	+				++			+			+++				
LSC								+++	+				+	++				-		+					+				
LGS				++				++						++	+				++	++						++	++		
SMS			+						+				-						++	+					++	+++	+	+++	

Table 3.6 Significant correlations between net growth rates of phytoplankton taxa during 1981/1982 (above diagonal) and 1982/1983 (below diagonal). The sign of the correlation is used and the significance is: one sign $P < 0.05$, two signs $P < 0.01$, and three signs $P < 0.001$. Codes as in Table 3.4.

1981/1982			1982/1983		
COMMUNITY DAY NO.	ID	TRANSITION DAY NO.	COMMUNITY DAY NO.	ID	TRANSITION DAY NO.
0-7	A1	7-14	394-408	E1	408-415
14-28	A2	28-39	415-429	E2	429-436
39-63	A3	63-70	436	E3	436-443
70	B1	70-77	443-457	E4	457-462
77	C1	77-81	462	F	462-466
81-88	C2	88-91	466-479	G1	479-491
91	C3	91-95	491	G2	491-497
95	D1	95-98	497-505	G1	505-508
98-105	C4	105-123	508-515	H1	515-522
123	B1	123-126	522	G2	522-529
126-144	C1	144-148	529-541	G1	541-547
148-226	C4	226-234	547	H1	547-562
234-267	B2	267-275	562-569	H2	569-576
275	C4	275-282	576-681	H3	681-701
282	B2	282-289	701	H2	701-716
289	C4	289-296	716	I1	716-737
296-324	B2	324-331	737	I2	
331-387	D2				

Table 3.7 Phytoplankton communities and transition periods during 1981/1982 and 1982/1983.

1981/1982		1982/1983	
DAY NO.	ID	DAY NO.	ID
0-7	A1	394-408	C4
14-28	A2	415-429	D1
39-63	A3	436	D2
70	A2	443-457	D3
77	B1	462	D4
81-88	B2	466-479	D5
91	B3	491	D6
95	C1	497-505	D5
98-105	B4	508-515	C5
123	D1	522	D6
126-144	B1	529-541	D5
148-226	B4	547	C5
234-267	C2	562-569	C6
275	B4	576-681	C7
282	C2	701	C6
289	B4	716	A2
296-324	C2	737	A1
331-387	C3		

Table 3.8 Phytoplankton communities for 1981/1982 and 1982/1983 combined.

A1	A2	A3				
Ochromonas Cryptomonas 1 [Cryptomonas 2 Ankistrodesmus]	Ochromonas Cryptomonas 1	Ochromonas Cryptomonas 1 Cryptomonas 2				
B1	**B2**	**B3**	**B4**			
Microcystis Ankistrodesmus Carteria [Cyclotella 2 Schroederia]	Melosira 1 [Microcystis Cyclotella 2] Carteria	Microcystis Ankistrodesmus	Microcystis			
C1	**C2**	**C3**	**C4**	**C5**	**C6**	**C7**
Ankistrodesmus Cyclotella 2 Cyanarcus Microcystis	Microcystis Ochromonas Cyanarcus Cyclotella 2	Cyanarcus Sphaerocystis Cyclotella 2	Cyanarcus [Schroederia Ochromonas Oocystis]	[Microcystis Sphaerocystis] Oocystis UBG Schroederia	Cyclotella 2 Microcystis Ochromonas [Oocystis UBG]	Cyclotella 2 Microcystis Cryptomonas 1
D1	**D2**	**D3**	**D4**	**D5**	**D6**	
Schroederia Carteria	Carteria Schroederia	Schroederia SMS Ochromonas LSG	UBG Schroederia	Oocystis Schroederia UBG	Oocystis	

Table 3.9 Dominant phytoplankton taxa in the multivariate communities. Co-dominants are bracketed.

1981/1982			1982/1983		
COMMUNITY DAY NO.	ID	TRANSITION DAY NO.	COMMUNITY DAY NO.	ID	TRANSITION DAY NO.
7-18	1	18-21	394-443	6A	443-450
21-53	2A	53-56	450-512	6B	512-519
56-77	2B	77-81	519	6C	519-529
81-88	3	88-91	529-547	6B	547-562
91-190	2C	190-197	562-569	6D	569-576
197-248	4	248-260	576-632	6C	632-639
260-289	5A	289-296	639-646	7A	646-653
296-331	5B	331-339	653	7B	653-667
339-387	2A		667-681	7A	681-701
			701	6C	701-716
			716-737	6A	

Table 3.10 Zooplankton communities and transition periods during 1981/1982 and 1982/1983.

1981/1982		1982/1983	
COMMUNITY DAY NO.	ID	COMMUNITY DAY NO.	ID
7-18	1A	394-443	1B
21-53	1B	450-512	1E
56	2A	519	1F
60-70	1B	529-547	1E
74-77	1C	562-569	1G
81-88	3	576-632	1F
91-190	2B	639-646	5A
197-248	4A	653	5B
260-289	4B	667-681	5A
296-331	1D	701	1F
339-387	1B	716-737	1B

Table 3.11 Zooplankton communities for 1981/1982 and 1982/1983 combined.

Community	Dominant taxa
1A	Ceriodaphnia q. nauplii Daphnia copepodite
1B	nauplii Ceriodaphnia q. Calamoecia copepodite Boeckella
1C	[nauplii, copepodite] Calamoecia [Ceriodaphnia q., Hexarthra]
1D	nauplii Calamoecia Ceriodaphnia q. cyclopoid
1E	nauplii Calamoecia Hexarthra copepodite Daphnia
1F	nauplii Calamoecia cyclopoid copepodite
1G	nauplii [Hexarthra, Asplanchna] [Calamoecia, cyclopoid, copepodite]
2A	Syncheata [nauplii, Calamoecia, Ceriodaphnia q.] [cyclopoid, copepodite, Hexarthra]
2B	nauplii Calamoecia copepodite Boeckella Ceriodaphnia q. cyclopoid Bosmina Hexarthra
3	nauplii [Keratella, Polyarthra] [cyclopoid, Calamoecia, Hexarthra] copepodite
4A	[nauplii, cyclopoid] Hexarthra Ceriodaphnia q. Ceriodaphnia c. Diaphanosoma
4B	nauplii cyclopoid Hexarthra
5A	nauplii [cyclopoid, Calamoecia]
5B	nauplii cyclopoid

Table 3.12 Dominant zooplankton taxa in the multivariate communities. Co-dominants are bracketed.

Phytoplankton Community Change	Phytoplankton Specific Change from	to	Phytoplankton Biomass Change	Water Column Change	Zooplankton Biomass Change	Zooplankton Community Change	Zooplankton Specific Change from	to
1. A1-A2 (7-14)[A]	[B] Cryptomonas Ochromonas Ankistrodesmus	Ochromonas	[C] 0.01-0.09 0.11-0.94[D]	[E] 10,10-11 0.17-0.17[F]	[G] 3.5-6.5	{1A-1B} (18-21)		
2. A2-A3 (28-39)	Ochromonas Cryptomonas 1	Ochromonas Cryptomonas 2	0.08-0.62 1.21-6.25	15,15-10 0.12-0.19	4.2,4.3-10.6	{1B-2A} {2A-1B} (53-56) (56-60)		
3. A3-A2 (63-70)	Ochromonas Cryptomonas 1	Microcystis Ochromonas Schroederia	0.49-0.40 [3.50]-3.19	5,[8]-8 [0.24]-0.26	11.1,11.0-10.3			
4. A2-B1 (70-77)	Microcystis Ochromonas Schroederia	Cyclotella 2 Ankistrodesmus	0.40-7.92 3.19-63.39	8,8-8 0.26-0.23	11.0,10.3,7.3	1B-1C (70-74)	naup Cq Ca	naup cop Ca
5. B1-B2 (77-81)	Cyclotella 2 Ankistrodesmus	Carteria Melosira 1 Cyclotella 2	7.92-14.18 63.39-85.07	8,8-6 0.23-0.31	10.3,7.3-27.7	1C-3 (77-81)	naup cop Ca	naup Ker Poly
6. B2-B3 (88-91)	Melosira 1 Microcystis	Microcystis Ankistrodesmus	35.65-0.10 178.2-0.29	6,5-3 0.44-0.85	27.7,20.0-38.8	3-2B (88-91)	naup Ker Poly	naup Ca cop
7. B3-C1 (91-95)	Microcystis Ankistrodesmus	Ankistrodesmus Cyclotella 2 Cyanarcus	0.10-0.66 0.29-3.95	5,3-6 0.85-0.32	15.4,38.8-42.9			
8. C1-B4 (95-98)	Ankistrodesmus Cyclotella 2 Cyanarcus	Microcystis	0.66-0.59 3.95-5.88	5,6-10 0.32-0.22	20.0,42.9-64.5			
9. B4-D1 (105-123)	Microcystis	Schroederia	3.29-0.77 26.31-5.39	10,8-7 0.30-0.37	64.5,28.6-33.5			
10. D1-B1 (123-126)	Schroederia	Microcystis Carteria Schroederia	0.77-5.52 5.39-38.66	5,7-7 0.37-0.34	22.0,33.5-38.1			
11. B1-B4 (144-148)	Ankistrodesmus Microcystis Melosira	Microcystis	2.77-6.05 22.15-60.50	6,8-10 0.30-0.22	19.5,19.4-16.2	{2B-4A} (190-197)		

Table 3.13 Changes in phytoplankton community composition and biomass in Mt Bold Reservoir during the 1981/1983 study period. Concurrent changes in water column mixing, z_{eu}/z_{mix} and zooplankton community biomass and composition are tabled.

Notes: A (Day numbers of change); B Dominant taxa in order; C Biomass concentration (cm^3 m^{-3}); D Areal biomass (cm^3 m^{-2}); E Mixed depth (m) (7 day lag, present change); F z_{eu}/z_{mix}; G Areal biomass (g dry wt m^{-2}) (7 day lag, present change); [ ] Value on nearest day; { } Subsequent zooplankton change

Phytoplankton Community Change	Phytoplankton Specific Change		Phytoplankton Biomass Change	Water Column Change	Zooplankton Biomass Change	Zooplankton Community Change	Zooplankton Specific Change	
	from	to					from	to
12. B4-C2 (226-234)	Microcystis	Cyclotella 2 Coelastrum	3.50-3.76 80.46-86.45	22,23-23 0.11-0.11	4.9,3.9-4.0	{4A-4B} (248-260)		
13. C2-B4 (267-275)	Microcystis Cyanarcus Ankistrodesmus Sphaerocystis	Microcystis	1.02-1.48 23.36-34.09	23,23-23 0.13-0.13	2.6,1.9-2.5			
14. B4-C2 (275-282)	Microcystis	Microcystis Anabaean	1.48-1.37 34.09-30.24	23,23-22 0.13-0.15	1.9,2.5-2.5			
15. C2-B4 (282-289)	Microcystis Anabaena	Microcystis	1.37-1.27 30.24-29.21	23,22-23 0.15-0.12	2.5,2.5-1.5			
16. B4-C2 (289-296)	Microcystis	Microcystis Melosira Sphaerocystis	1.27-1.14 29.21-25.01	22,23-22 0.12-0.13	2.5,1.5-1.8	4B-1D (289-296)	naup cyc Hex	naup Ca Cq
17. C2-C3 (324-331)	Microcystis Ochromonas Cyanarcus	Cyanarcus Sphaerocystis	0.48-0.43 9.12-7.38	20,19-17 0.10-0.13	3.4,2.9-4.1	{1D-1B} (331-339)		
18. C3-C4 (387-394)	Cyanarcus Cyclotella 2	Cyanarcus Cyclotella 2 Ochromonas	1.95-[0.33] 52.68-4.61	8,27-14 0.19-0.45	13.2,11.6-28.8			
19. C4-D1 (408-415)	Cyanarcus Schroederia	Schroederia	0.16-0.18 2.59-0.53	7,16-3 0.48-3.00	19.6,8.9-15.3			
20. D1-D2 (429-436)	Schroederia Carteria	Carteria Schroederia	0.74-0.42 6.67-7.08	10,9-17 0.96-0.56	18.1,16.2-23.2			
21. D2-D3 (436-443)	Carteria Schroederia	SMS Schroederia	0.42-0.07 7.08-0.48	9,17-7 0.56-1.75	16.2,23.2-19.3	{1B-1E} (443-450)		
22. D3-D4 (457-462)	Schroederia Ochromonas LSG	UGB	0.15-4.50 1.96-76.45	7,13-17 0.81-0.61	14.2,13.2-12.2			
23. D4-D5 (462-466)	UBG	Oocystis Schroederia UBG	4.50-[11.19] 76.45-[111.9]	13,17-[7] 0.61-[1.51]	13.2,12.2-[9.9]			

Table 3.13 continued

Phytoplankton Community Change	Phytoplankton Specific Change from	to	Phytoplankton Biomass Change	Water Column Change	Zooplankton Biomass Change	Zooplankton Community Change	Zooplankton Specific Change from	to
24. D5-D6 (479-491)	Oocystis Schroederia	Oocystis	0.48-1.63 3.88-32.68	7,8-20 1.59-0.46	9.9,18.1-10.5			
25. D6-D5 (491-497)	Oocystis	Oocystis UBG	1.63-0.31 32.68-9.91	7,20-32 0.46-0.30	5.4,10.5-5.2			
26. D5-C5 (505-508)	Schroederia Oocystis UBG	Microcystis UBG	0.25-[0.11] 2.51-[0.56]	32,10-[5] 1.37-[2.67]	5.2,35.5-[17.7]	1E-1F (512-519)	naup Ca Hex	naup Ca cyc
27. C5-D6 (515-522)	Sphaerocystis Microcystis	Oocystis UBG	[0.11]-1.03 [0.56]-[8.27]	10,[5]-[8] [2.67]-[2.37]	[17.7]-[5.8]			
28. D6-D5 (522-529)	Oocystis UBG	Oocystis	1.03-0.67 [8.27]-10.73	5,[8]-16 [2.37]-[0.70]	[5.8]-[7.6]	1F-1E (519-529)	naup Ca cyc	naup Ca Hex
29. D5-C5 (541-547)	Oocystis Schroederia	Oocystis Ceratium Sphaerocystis Microcystis	0.78-8.24 7.75-74.15	14,10-9 1.10-1.13	14.5,7.8-4.1			
30. C5-C6 (547-562)	Oocystis Ceratium Sphaerocystis Microcystis	Microcystis Sphaerocystis Ochromonas	8.24-0.33 74.15-10.50	10,9-32 1.13-0.23	7.8,4.1-8.3	1E-1G (547-562)	naup Ca Hex	naup Hex Asp
31. C6-C7 (569-576)	Cyclotella 2 Ochromonas	Microcystis Cyclotella 2	0.74-1.17 22.97-36.34	32,31-31 0.22-0.25	8.3,6.6-7.3	1G-1F (569-576)	naup Hex Asp	naup Ca cyc
32. C7-C6 (681-701)	Cyclotella 2 Sphaerocystis Cryptomonas 1	Microcystis Cyclotella 2 UBG,SMS Ochromonas	2.31-0.22 71.55-7.76	30,31-36 0.81-4.1	0.8-4.1	5A-1F (681-701)	naup cyc Ca	naup Ca cyc
33. C6-A2 (701-716)	Microcystis Cyclotella 2 UBG,SMS Ochromonas	Ochromonas	0.22-0.02 7.76-0.09	31,36-4 0.07-0.65	4.1-9.5	1F-1B (701-716)	naup Ca cyc	naup Cq Ca
34. A2-A1 (716-737)	Ochromonas	Ochromonas Cryptomonas 2	0.02-0.04 0.09-0.82	36,4-23 0.65-0.08	9.5-8.2			

Table 3.13 continued

WATER SAMPLE			Melosira		Cryptomonas A		Cryptomonas B		Schroederia		Ankistrodesmus	
Site	Sample	Transect	U	W	U	W	U	W	U	W	U	W
1	1	A	79	115	40	62	3	2	234	257	56	53
		B	79	87	20	13	10	19	273	303	56	63
	2	A	77	75	42	41	10	14	267	238	97	92
		B	76	69	25	22	6	3	287	298	44	44
2	1	A	100	100	12	15	0	0	269	293	61	65
		B	67	66	27	23	15	10	336	375	39	60
	2	A	71	78	15	15	3	5	398	377	74	67
		B	98	95	12	10	0	0	353	348	74	63
3	1	A	83	84	25	24	9	7	386	386	77	69
		B	105	68	22	9	12	8	377	374	90	72
	2	A	139	127	18	24	9	10	293	313	50	46
		B	76	65	13	12	16	14	265	277	38	24
4	1	A	89	85	59	57	9	9	326	286	68	65
		B	71	96	97	90	19	20	387	382	68	85
	2	A	104	55	79	82	16	9	340	334	88	79
		B	80	87	46	43	15	16	349	326	68	71
5	1	A	59	57	37	39	15	18	398	342	49	33
		B	74	68	59	68	12	8	338	317	77	89
	2	A	98	120	27	25	15	8	468	431	86	84
		B	85	86	30	33	9	5	390	333	112	99

Table 4.1 Unweighted [U] and weighted [W] densities (numbers ml^{-1}) of target phytoplankton taxa in the water samples taken on 16.XI.84.

TAXA	Site	NET	TRAP Unweighted	TRAP Weighted
Boeckella	1	0.69 (0.27)	3.96 (1.01)	4.00
	2	0.61 (0.24)	3.45 (1.38)	2.69
	3	0.49 (0.05)	2.31 (1.44)	1.52
	4	0.21 (0.11)	0.73 (0.24)	0.61
	5	0.29 (0.08)	2.44 (1.62)	1.60
Calamoecia	1	3.89 (0.16)	15.42 (4.02)	15.24
	2	1.65 (0.11)	6.96 (3.87)	4.96
	3	2.23 (0.05)	7.30 (4.55)	4.89
	4	1.17 (0.03)	3.25 (0.93)	2.95
	5	0.90 (0)	5.43 (2.92)	3.76
copepodites	1	0.77 (0.03)	5.63 (1.19)	5.47
	2	1.17 (0.11)	3.71 (2.07)	2.73
	3	1.42 (0.17)	3.53 (2.01)	2.46
	4	0.73 (0.16)	2.47 (0.80)	2.35
	5	0.90 (0)	3.29 (1.06)	2.55
nauplii	1	9.88 (0.53)	45.84 (9.20)	44.93
	2	7.78 (0.61)	23.65 (6.83)	20.82
	3	9.46 (0.60)	21.72 (7.47)	18.23
	4	6.88 (0.34)	17.53 (3.56)	17.54
	5	5.85 (0.75)	20.36 (5.50)	18.15
Daphnia	1	0.56 (0.24)	1.15 (0.15)	1.14
	2	0.48 (0.05)	1.00 (0.23)	0.96
	3	0.65 (0.11)	1.21 (0.59)	0.91
	4	0.55 (0.24)	0.82 (0.23)	0.88
	5	0.48 (0.11)	1.51 (0.55)	1.18
Ceriodaphnia	1	3.63 (0.32)	8.57 (1.26)	8.27
	2	4.28 (0.40)	9.07 (1.26)	8.69
	3	4.68 (0.93)	10.67 (2.25)	9.75
	4	3.76 (0.28)	6.69 (1.12)	6.40
	5	3.67 (0.22)	8.32 (2.03)	7.71
Diaphanosoma	1	1.26 (0.26)	5.67 (1.51)	5.82
	2	0.83 (0.14)	2.98 (1.25)	2.40
	3	1.23 (0.03)	1.61 (0.89)	1.09
	4	0.75 (0.18)	0.58 (0.32)	0.43
	5	0.38 (0.06)	1.81 (0.94)	1.30

Table 4.2 Densities (numbers l^{-1}) of the dominant zooplankton taxa estimated using a net and a trap sampler. Tabled are the means (se) at five sites on 2.XI.84.

TAXA	$\bar{D}$	(sd)	t	sig.	$\bar{\%}$	(se)
Boeckella	2.12	(1.06)	4.47	*	19.4	(2.0)
Calamoecia	5.70	(3.50)	3.64	*	26.4	(2.3)
copepodites	2.73	(1.23)	4.96	**	28.5	(3.0)
nauplii	17.85	(10.32)	3.87	*	33.2	(2.7)
Daphnia	0.59	(0.27)	4.84	**	49.9	(4.0)
Ceriodaphnia	4.66	(1.10)	9.46	***	46.7	(1.8)
Diaphanosoma	1.64	(1.79)	2.05	ns	55.4	(15.0)

Table 4.3 Results of paired t test on densities of dominant zooplankton taxa between net and trap samples. Tabled are the mean difference [$\bar{D}$] (sd), the t value and associated level of significance. Also tabled is the mean (se) ratio of net density to unweighted trap density expressed as a percentage.

DATE	z_{mix}	N^2 (0-10m)	$K_d ave$	(se)
2.XI.84	5	687	2.228	(0.061)
16.XI.84	8	1093	2.083	(0.046)
23.XI.84	8	816	2.158	(0.030)
30.XI.84	6	1311	2.215	(0.074)
6.XII.84	7	1430	-----	-------
11.XII.84	7	1271	-----	-------
14.XII.84	7	1137	2.157	(0.041)
21.XII.84	10	461	2.124	(0.036)
28.XII.84	11,5	1006	2.317	(0.039)
4.I.85	10,6	617	1.857	(0.080)
11.I.85	13,9	938	1.551	(0.029)

Table 4.4 Estimates of mixed depth [z_{mix}] (m), Brunt-Vaisala stability [N^2] (10^{-6} s^{-2}) and average vertical attenuation of PAR [$K_d ave$] (ln m^{-1}) at the southern site in Mt Bold Reservoir on the sampling dates indicated.

	DEPTH (m)	SAMPLING DATE		
		5.XI.84	2.XII.84	14.I.85
TP	0	137	187	78
	10	144	310	92
	20	151	247	138
	30	137	311	118
SRP	0	94	70	37
	10	98	73	46
	20	101	85	91
	30	96	67	86
IN	0	0.65	0.59	0.29
	10	0.69	0.65	0.29
	20	0.74	0.76	0.74
	30	0.75	0.76	0.69
TKN	0	1.06	1.07	0.89
	10	1.02	1.03	1.13
	20	1.02	1.07	0.94
	30	0.98	1.00	0.89
TN:TP	0	12.5	8.9	15.1
	10	11.9	5.4	15.4
	20	11.7	7.4	12.2
	30	12.6	5.7	13.4
K	0	451	479	505
	10	453	482	499
	20	484	504	495
	30	509	515	524

Table 4.5 Concentrations of total phosphorus [TP] ($\mu g\ l^{-1}$), soluble reactive phosphorus [SRP] ($\mu g\ l^{-1}$), inorganic nitrogen [IN] ($mg\ l^{-1}$) and total Kjeldahl nitrogen [TKN] ($mg\ l^{-1}$) at four depths in Mt Bold Reservoir on the dates shown. The ratio of total nitrogen to total phosphorus [TN:TP] and the conductivity [K] ($\mu S\ cm^{-1}$) are also tabled.

DATE	Melosira		Carteria		Ankistrodesmus		Schroederia		Cryptomonas A		Cryptomonas B	
	Site	Tube	Site	Tube	Site	Tube	Site	Tube	Site	Tube	Site	Tube
2.XI.84	0.14 ns	0.78 ns	---- --	---- --	---- --	---- --	0.67 ns	1.60 ns	0.32 ns	3.33 ns	5.99 *	2.58 ns
16.XI.84	1.80 ns	0.50 ns	---- --	---- --	0.37 ns	2.77 ns	2.27 ns	3.54 *	12.5 **	0.76 ns	7.76 *	0.36 ns
30.XI.84	2.79 ns	2.08 ns	---- --	---- --	3.51 ns	0.48 ns	1.85 ns	1.77 ns	2.79 ns	3.49 *	1.07 ns	1.71 ns
14.XII.84	1.20 ns	5.61 *	9.57 *	1.44 ns	3.51 ns	1.35 ns	2.49 ns	3.99 *	7.17 *	2.33 ns	1.98 ns	0.68 ns
21.XII.84	1.33 ns	2.53 ns	1.40 ns	3.59 *	0.66 ns	2.55 ns	2.03 ns	1.23 ns	3.92 ns	0.22 ns	1.22 ns	0.56 ns
24.XII.84	2.24 ns	2.70 ns	1.74 ns	2.73 ns	4.93 ns	2.24 ns	1.23 ns	0.95 ns	1.99 ns	0.53 ns	---- --	---- --
28.XII.84	1.45 ns	0.75 ns	36.9 ***	2.19 ns	0.64 ns	4.28 *	0.59 ns	6.22 **	9.99 *	3.80 *	0.06 ns	1.82 ns
31.XII.84	12.8 **	0.12 ns	87.8 ***	0.15 ns	0.70 ns	1.04 ns	0.64 ns	1.14 ns	9.72 *	1.24 ns	---- --	---- --
4.I.85	3.45 ns	0.25 ns	2.88 ns	4.82 *	0.33 ns	2.56 ns	2.20 ns	0.37 ns	1.07 ns	0.91 ns	---- --	---- --
7.I.85	0.37 ns	2.69 ns	4.62 ns	1.28 ns	3.14 ns	0.72 ns	1.03 ns	5.83 ns	0.43 ns	6.62 **	---- --	---- --
11.I.85	6.00 *	0.24 ns	3.37 ns	0.21 ns	0.06 ns	1.32 ns	0.62 ns	2.70 ns	2.36 ns	0.83 ns	---- --	---- --

Table 4.6 Results of nested ANOVA on densities of the target phytoplankton taxa between the five sites on each sampling date. Tabled are the F ratios and levels of significance. Degrees of freedom are (4,5) and (5,10) for the site and tube F ratios respectively.

DATE	TAXA	BETWEEN SITES
2.XI.84	Cryptomonas B	4 5 3 2 1
16.XI.84	Cryptomonas A	2 3 1 5 4
	Cryptomonas B	2 1 3 5 4
14.XII.84	Carteria	3 4 5 1 2
	Cryptomonas A	3 4 5 2 1
28.XII.84	Carteria	1 2 5 3 4
	Cryptomonas A	1 5 2 3 4
31.XII.84	Melosira	ns
	Carteria	5 4 2 3 1
	Cryptomonas A	5 4 2 1 3
11.I.85	Melosira	ns

Table 4.7a Results of unplanned comparisons among phytoplankton mean densities between sites. Densities of the listed taxa are significantly different ($P < 0.05$) between the sites not connected by an underline.

DATE	TAXA	WITHIN SITE
16.XI.84	Schroederia	ns
30.XI.84	Cryptomonas A	ns
14.XII.84	Melosira	ns
	Schroederia	ns
21.XII.84	Carteria	ns
28.XII.84	Ankistrodesmus	ns
	Schroederia	Site 4
	Cryptomonas A	ns
4.I.85	Carteria	Site 5
7.I.85	Cryptomonas A	Site 3

Table 4.7b Results of unplanned comparisons among phytoplankton mean densities within sites. Densities of the listed taxa are significantly different ($P < 0.05$) between duplicate tube samples within the listed site.

DATE	Melosira			Carteria			Ankistrodesmus			Schroederia			Cryptomonas A			Cryptomonas B		
	S	T	C	S	T	C	S	T	C	S	T	C	S	T	C	S	T	C
2.XI.84	0	0	100	---	---	---	---	---	---	0	23	77	0	54	46	64	16	20
16.XI.84	9	0	91	---	---	---	0	47	53	33	37	30	69	0	31	38	0	62
30.XI.84	38	22	40	---	---	---	23	0	77	21	22	57	41	33	26	2	26	72
14.XII.84	8	64	28	72	5	23	42	9	49	37	38	25	68	13	19	14	0	86
21.XII.84	9	37	54	13	49	38	0	44	56	22	8	70	14	0	86	4	0	96
24.XII.84	31	32	37	21	37	42	58	16	26	5	0	95	12	0	88	---	---	---
28.XII.84	8	0	92	92	3	5	0	59	41	0	77	23	78	13	9	0	29	71
31.XII.84	26	0	74	76	0	24	0	2	98	0	7	93	71	3	26	---	---	---
4.I.85	13	0	87	44	37	19	0	44	56	10	0	90	2	0	98	---	---	---
7.I.85	0	46	54	50	6	44	28	0	72	1	70	29	0	74	26	---	---	---
11.I.85	23	0	77	7	0	93	0	14	86	0	46	54	22	0	78	---	---	---

Table 4.8 Percentage contribution of the three sampling levels; site [S], tube [T] and transect [C] to the total variance for each phytoplankton taxa on each sampling date.

TAXA	INTERVAL	(n)	Site	GROUP	LINEAR	DEVIATION	SLOPE	(se)
Melosira								
	2.XI.84-30.XI.84	(3)	1	72 ***	235 *	0.6 ns	0.183	(0.012)
			2	63 ***	1677 *	0.1 ns	0.192	(0.005)
			3	420 ***	245 *	3 ns	0.182	(0.012)
			4	78 ***	369 *	0.4 ns	0.193	(0.010)
			5	56 ***	124 ns	0.9 ns	0.203	(0.018)
	30.XI.84-24.XII.84	(4)	1	139 ***	72 *	6 *	0.103	(0.012)
			2	348 ***	1220 ***	0.9 ns	0.086	(0.002)
			3	273 ***	923 **	0.9 ns	0.102	(0.003)
			4	279 ***	512 **	2 ns	0.104	(0.005)
			5	251 ***	620 **	1 ns	0.106	(0.004)
	24.XII.84-4.I.85	(4)	1	49 ***	155 **	0.9 ns	-0.517	(0.043)
			2	27 ***	156 **	0.5 ns	-0.575	(0.046)
			3	110 ***	45 *	7 **	-0.532	(0.079)
			4	302 ***	469 **	2 ns	-0.473	(0.022)
			5	85 ***	555 **	0.5 ns	-0.561	(0.024)
Carteria								
	14.XII.84-28.XII.84	(4)	1	150 ***	36 *	12 **	0.285	(0.048)
			2	623 ***	16 ns	103 ***	0.300	(0.075)
			3	376 ***	51 *	21 ***	0.411	(0.057)
			4	871 ***	23 *	104 ***	0.417	(0.087)
			5	328 ***	21 *	44 ***	0.352	(0.078)
	31.XII.84-11.I.85	(4)	1	48 ***	215 **	0.7 ns	-0.568	(0.038)
		(4)	2	322 ***	1314 ***	0.7 ns	-0.573	(0.016)
	28.XII.84-11.I.85	(5)	3	129 ***	113 **	5 *	-0.583	(0.055)
		(5)	4	99 ***	200 ***	2 ns	-0.609	(0.043)
		(5)	5	53 ***	194 ***	1 ns	-0.478	(0.034)
Ankistrodesmus								
	16.XI.84-21.XII.84	(4)	1	18 ***	9 ns	5 *	0.025	(0.008)
			2	23 ***	5 ns	9 **	0.028	(0.012)
			3	19 ***	47 *	1 ns	0.033	(0.005)
			4	9 **	7 ns	3 ns	0.019	(0.007)
			5	11 ***	19 *	2 ns	0.026	(0.006)
	31.XII.84-7.I.85	(3)	1	54 ***	19 ns	6 *	-0.407	(0.094)
			2	101 ***	1626 *	0.1 ns	-0.590	(0.015)
			3	133 ***	569 *	0.5 ns	-0.382	(0.016)
			4	13 **	317 *	0.1 ns	-0.537	(0.030)
			5	14 **	54 ns	0.5 ns	-0.516	(0.070)
Cryptomonas A								
	21.XII.84-31.XII.84	(4)	1	4 *	3 ns	3 ns	0.189	(0.121)
	21.XII.84-28.XII.84	(3)	2	3 ns	2 ns	2 ns	0.210	(0.138)
		(3)	3	4 ns	4 ns	2 ns	0.366	(0.177)
		(3)	4	6 *	206 *	0.1 ns	0.497	(0.035)
		(3)	5	9 **	2 ns	7 *	0.366	(0.284)
	31.XII.84-7.I.85	(3)	1	14 **	5 ns	5 ns	-0.510	(0.241)
		(3)	2	2 ns	15 ns	0.3 ns	-0.270	(0.070)
	28.XII.84-7.I.85	(4)	3	16 ***	28 *	2 ns	-0.389	(0.074)
		(4)	4	19 ***	48 *	1 ns	-0.470	(0.068)
		(4)	5	4 *	12 ns	0.8 ns	-0.271	(0.078)
Schroederia								
	21.XII.84-11.I.85	(7)	1	23 ***	52 ***	2 ns	0.074	(0.010)
			2	22 ***	20 **	5 **	0.076	(0.017)
			3	17 ***	327 ***	0.3 ns	0.077	(0.004)
			4	12 ***	43 **	2 ns	0.080	(0.012)
			5	16 ***	52 ***	2 ns	0.063	(0.009)

Table 4.9 Results of regression analyses on density changes of the phytoplankton taxa across the indicated intervals, at each site. Tabled are the F ratios, levels of significance and slopes.

TAXA	DATE	SITE	INTERACTION
Boeckella	14.0 (10,55) ***	1.8 (4,40) ns	0.4 (40,55) ns
Calamoecia	45.4 (10,55) ***	2.2 (4,40) ns	0.9 (40,55) ns
copepodites	20.2 (10,55) ***	2.2 (4,40) ns	0.7 (40,55) ns
nauplii	117.6 (10,55) ***	1.3 (4,40) ns	1.3 (40,55) ns
Daphnia	17.3 (10,55) ***	0.9 (4,40) ns	0.4 (40,55) ns
Ceriodaphnia	12.7 (10,55) ***	2.7 (4,40) *	0.5 (40,55) ns
Diaphanosoma	417.7 (10,55) ***	1.2 (4,40) ns	3.0 (40,55) ***
Bosmina	21.2 (8,45) **	0.8 (4,32) ns	1.7 (32,45) *

Table 4.10 Results of factorial ANOVA on densities of dominant zooplankton taxa on all sampling dates, across the five sites. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

TAXA	DATE	SITE	INTERACTION	ERROR
Boeckella	57	0	0	43
Calamoecia	79	3	0	18
copepodites	64	3	0	33
nauplii	90	1	1	8
Daphnia	62	0	0	38
Ceriodaphnia	52	3	0	45
Diaphanosoma	87	1	6	6
Bosmina	60	0	10	30

Table 4.11 Percentage contribution of each variance component to the total density variance for each zooplankton taxa across the study period.

TAXA	k_s	1° z_{mix}	v'	2° z_{mix}	v'
Melosira	0.532	10.5	4.3	5.5	2.3
Carteria	0.562	11.3	4.9	6.7	2.9
Cryptomonas A	0.382	10.5	3.3	5.5	1.8
Ankistrodesmus	0.486	10.0	3.9	6.0	2.3

Table 4.12 Calculation of intrinsic sinking rates [v'] (m d^{-1}) from the loss rate constants [k_s] (ln d^{-1}) and the mean mixed depths [z_{mix}] (m) for both primary [1°] and secondary [2°] thermoclines.

TAXA	EXPERIMENT										
	1	2	3	4	5	6	7	8	9	10	11
Boeckella	1.40 (0.39)	1.55 (0.73)	0.50 (0.78)	0.28 (0.43)	0.43 (0.47)	0.30 (0.39)	0.61 (0.39)	1.47 (0.83)	0.89 (0.47)	0.73 (0.65)	0.52 (0.37)
Calamoecia	31.76 (7.11)	33.08 (13.46)	15.68 (6.97)	9.21 (1.24)	11.34 (3.77)	15.11 (4.35)	8.50 (3.79)	26.06 (5.58)	5.25 (1.59)	15.43 (2.89)	16.07 (7.49)
Copepodite	5.83 (1.34)	8.54 (3.24)	6.80 (5.24)	5.31 (1.14)	9.90 (3.62)	6.90 (1.85)	4.05 (1.30)	25.22 (5.26)	4.05 (1.01)	6.55 (1.85)	5.62 (2.17)
Nauplii	17.03 (1.74)	33.56 (11.03)	21.50 (6.03)	22.50 (6.54)	35.74 (6.75)	38.80 (5.04)	30.95 (6.66)	20.41 (2.94)	18.00 (2.72)	11.77 (2.97)	93.38 (11.46)
Daphnia	5.50 (2.32)	7.20 (4.50)	1.11 (0.86)	0.32 (0.26)	5.30 (3.60)	6.62 (1.69)	2.74 (3.39)	44.17 (19.13)	26.61 (11.62)	5.08 (5.62)	0.15 (0.29)
Ceriodaphnia	2.30 (0.21)	0.29 (0.31)	0.24 (0.18)	0.04 (0.13)	0.29 (0.15)	0.20 (0.23)	0.19 (0.35)	0.76 (0.47)	0.36 (0.37)	1.41 (0.61)	0.91 (0.62)
Diaphanosoma	0.35 (0.14)	0.47 (0.46)	0.23 (0.40)	0.04 (0.13)	0.25 (0.24)	---- ----	---- ----	0.11 (0.20)	0.03 (0.09)	---- ----	0.03 (0.09)
Moina	0.86 (0.40)	0.18 (0.39)	---- ----	---- ----	0.05 (0.10)	0.11 (0.20)	0.05 (0.11)	0.15 (0.29)	0.23 (0.33)	0.05 (0.11)	---- ----
Hexarthra	4.61 (2.24)	7.85 (2.40)	14.25 (12.45)	24.17 (9.16)	16.18 (7.35)	12.68 (3.44)	6.75 (3.92)	2.22 (1.44)	0.55 (0.32)	3.82 (1.80)	1.52 (0.87)

Table 5.1 Initial densities (numbers l^{-1}) of dominant zooplankton taxa in the grazed treatments of the enclosure experiments. Tabled are the means (sd) for all grazed bags within each experiment.

EXPERIMENT	TAXA			BAG			INTERACTION		
1	56.90	(8,8)	***	0.18	(1,18)	ns	0.99	(8,18)	ns
2	29.33	(8,32)	***	16.78	(4,45)	***	6.43	(32,45)	***
3	31.85	(8,32)	***	2.75	(4,45)	*	0.71	(32,45)	ns
4	43.82	(5,20)	***	1.49	(4,30)	ns	1.43	(20,30)	ns
5	71.69	(7,28)	***	3.79	(4,40)	*	1.58	(28,40)	ns
6	185.28	(7,28)	***	5.64	(4,40)	**	1.82	(28,40)	*
7	72.87	(6,24)	***	2.11	(4,35)	ns	1.66	(24,35)	ns
8	46.84	(8,32)	***	3.46	(4,45)	*	1.51	(32,45)	ns
9	32.46	(8,32)	***	8.54	(4,45)	***	4.42	(32,45)	***
10	37.76	(7,28)	***	1.03	(4,40)	ns	1.18	(28,40)	ns
11	262.86	(7,28)	***	15.91	(4,40)	***	6.29	(28,40)	***

Table 5.2 Results of factorial ANOVA on initial densities of dominant zooplankton taxa within the grazed treatments of the enclosure experiments. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

EXPERIMENT	TAXA	BAG
2	Nauplii	2 vs. others
	Calamoecia	2 vs. 6,8 4 vs. 6,8 8 vs. 10
3	No significant differences between bags for any taxa	
5	No significant differences between bags for any taxa	
6	No significant differences between bags for any taxa	
8	Daphnia	4 vs. 6
9	Daphnia	2 vs. others 10 vs. 2,4,8
11	Nauplii	8 vs. others 4 vs. 10
	Calamoecia	8 vs. 2,4,6

Table 5.3 Results of unplanned comparisons among mean initial zooplankton taxa densities within the grazed treatments of the enclosure experiments. Densities of the listed taxa are significantly different ($P < 0.05$) between the indicated bags.

TAXA	EXPERIMENT									
	2	3	4	5	6	7	8	9	10	11
Boeckella	2.04 (1.72)	3.46 (1.14)	9.41 (2.11)	2.28 (1.00)	3.16 (1.48)	3.57 (1.17)	1.17 (0.69)	0.73 (0.39)	0.37 (0.19)	7.65 (1.88)
Calamoecia	17.14 (7.04)	16.37 (3.49)	12.66 (1.94)	7.40 (2.06)	6.12 (3.90)	5.66 (3.07)	14.33 (2.89)	2.51 (0.89)	6.75 (0.58)	12.34 (3.06)
Copepodite	7.29 (3.66)	6.83 (4.13)	6.44 (3.01)	6.25 (1.66)	6.22 (2.81)	9.20 (4.98)	1.21 (0.55)	0.29 (0.31)	0.36 (0.20)	5.76 (2.48)
Nauplii	21.18 (8.72)	10.83 (5.42)	8.30 (3.57)	3.76 (1.56)	5.23 (2.93)	7.86 (2.88)	2.22 (1.46)	9.38 (2.22)	2.12 (0.56)	4.77 (2.73)
Daphnia	1.34 (1.48)	4.37 (2.30)	6.80 (2.92)	8.54 (4.48)	14.17 (2.93)	8.95 (5.22)	1.41 (1.15)	2.96 (0.73)	4.03 (1.40)	4.37 (2.54)
Ceriodaphnia	0.17 (0.36)	0.23 (0.27)	0.35 (0.03)	0.85 (0.23)	0.26 (0.26)	0.46 (0.43)	0.16 (0.16)	0.58 (0.38)	2.62 (1.17)	6.53 (1.22)
Diaphanosoma	0.16 (0.33)	0.02 (0.04)	0.14 (0.18)	0.05 (0.12)	---- ----	---- ----	---- ----	---- ----	---- ----	1.03 (0.57)
Juveniles	---- ----	0.74 (0.68)	2.10 (2.44)	4.60 (4.59)	4.09 (0.59)	0.37 (0.21)	0.50 (1.05)	0.84 (0.85)	0.08 (0.20)	2.13 (0.83)
Chydorus	0.18 (0.39)	5.96 (3.79)	5.99 (4.66)	---- ----	---- ----	---- ----	---- ----	0.05 (0.11)	---- ----	---- ----

Table 5.4 Final densities (numbers l^{-1}) of dominant zooplankton taxa in the grazed treatments of the enclosure experiments. Experiment 1 zooplankton were not saved. Tabled are the means (sd) for all grazed bags within each experiment.

TAXA	EXPERIMENT 2	3	4	5	6	7	8	9	10	11
Boeckella	0.02 (0.03)	0.05 (0.08)	----	0.21 (0.14)	0.01 (0.03)	0.10 (0.09)	0.03 (0.03)	0.09 (0.12)	0.01 (0.03)	----
Calamoecia	1.15 (2.17)	0.25 (0.25)	0.07 (0.14)	0.42 (0.33)	----	0.20 (0.23)	0.01 (0.02)	0.24 (0.26)	0.03 (0.05)	0.03 (0.06)
Copepodite	1.38 (2.53)	0.47 (0.49)	0.07 (0.14)	0.55 (0.50)	0.02 (0.04)	0.37 (0.41)	----	0.10 (0.10)	0.01 (0.02)	----
Nauplii	1.60 (2.94)	0.53 (0.74)	0.21 (0.23)	0.43 (0.51)	----	0.31 (0.43)	0.09 (0.14)	0.16 (0.15)	0.05 (0.08)	0.04 (0.07)
Daphnia	0.09 (0.15)	0.15 (0.25)	----	0.31 (0.38)	0.02 (0.03)	0.41 (0.70)	0.01 (0.04)	0.31 (0.57)	----	----
Ceriodaphnia	0.01 (0.04)	----	----	0.01 (0.01)	----	0.01 (0.03)	----	0.05 (0.11)	0.02 (0.04)	0.01 (0.04)
Diaphanosoma	----	----	----	----	----	----	----	----	----	----
Juveniles	----	----	0.08 (0.15)	0.04 (0.08)	0.03 (0.05)	0.11 (0.24)	----	0.05 (0.09)	----	----
Chydorus	0.06 (0.08)	3.54 (2.54)	2.49 (1.82)	----	----	----	----	0.39 (0.67)	----	----

Table 5.5 Final densities (numbers l^{-1}) of dominant zooplankton taxa in the ungrazed treatments of the enclosure experiments. Experiment 1 zooplankton were not saved. Tabled are the means (sd) for all ungrazed bags within each experiment.

EXPERIMENT	TAXA	BAG	INTERACTION
1	Final zooplankton not saved		
2	23.79 (4,16) ***	4.40 (4,25) **	1.22 (16,25) ns
3	24.52 (7,28) ***	8.63 (4,40) ***	1.33 (28,40) ns
4	7.84 (8.8) **	2.15 (1,18) ns	0.42 (8,18) ns
5	7.58 (6,24) ***	4.57 (4,35) **	1.19 (24,35) ns
6	27.75 (7,28) ***	2.41 (4,40) ns	0.46 (28,40) ns
7	7.09 (6,24) ***	4.03 (4,35) **	3.14 (24,35) **
8	61.33 (5,20) ***	0.10 (4,30) ns	1.29 (20,30) ns
9	76.25 (6,24) ***	0.64 (4,35) ns	0.41 (24,35) ns
10	69.09 (5,20) ***	1.97 (4,30) ns	0.94 (20,30) ns
11	20.67 (7,28) ***	4.16 (4,40) **	0.89 (28,40) ns

Table 5.6 Results of factorial ANOVA on final densities of dominant zooplankton taxa within the grazed treatments of the enclosure experiments. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

EXPERIMENT	TAXA	BAG
2	Calamoecia	4 vs. 10
	Nauplii	6 vs. 2,4,8 8 vs. 10
3	Calamoecia	8 vs. 2,6
	Copepodite	8 vs. 2,4,6
	Nauplii	8 vs. others
	Daphnia	6 vs. 10
	Chydorid	8 vs. 2,6 10 vs. 2,4,6
5	Juveniles	6 vs. others
	Daphnia	6 vs. 2,4,10 8 vs. 4,10
7	Calamoecia	4 vs. 2,6,8
	Copepodite	4 vs. others
	Nauplii	4 vs. 2,6
	Daphnia	2 vs. others
11	Boeckella	4 vs. 10
	Calamoecia	4 vs. 8,10 2 vs. 10
	Copepodite	8 vs. 10
	Nauplii	4 vs. 8,10 6 vs. 8,10
	Daphnia	6 vs. 2,4,8 4 vs. 10

Table 5.7 Results of unplanned comparisons among mean final zooplankton taxa densities within the grazed treatments of the enclosure experiments. Densities of the listed taxa are significantly different ($P < 0.05$) between the indicated bags.

EXPERIMENT	TAXA	BAG	INTERACTION
1	Final zooplankton not saved		
2	1.33 (5,20) ns	5.21 (4,30) **	1.67 (20,30) ns
3	6.10 (5,15) **	5.32 (3,24) **	3.24 (15,24) **
4	Insufficient numbers for analysis		
5	1.54 (4,16) ns	8.79 (4,25) ***	0.90 (16,25) ns
6	Insufficient numbers for analysis		
7	1.26 (4,16) ns	20.38 (4,25) ***	1.81 (16,25) ns
8	1.24 (2,8) ns	2.44 (4,15) ns	2.03 (8,15) ns
9	2.15 (3,9) ns	6.60 (3,16) **	0.73 (9,16) ns
10	Insufficient numbers for analysis		
11	Insufficient numbers for analysis		

Table 5.8 Results of factorial ANOVA on final densities of dominant zooplankton taxa within the ungrazed treatments of the enclosure experiments. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

EXPERIMENT	TAXA	BAG
2	Calamoecia	3 vs. others
	Copepodite	3 vs. others
	Nauplii	3 vs. others
3	Chydorid	7 vs. others
5	Copepodite	3 vs. 1,9
	Nauplii	3 vs. others
7	Calamoecia	3 vs. 1,7,9
	Copepodite	3 vs. others
	Nauplii	3 vs. others
	Daphnia	3 vs. others
9	Calamoecia	1 vs. others

Table 5.9 Results of unplanned comparisons among mean final zooplankton taxa densities within the ungrazed treatments of the enclosure experiments. Densities of the listed taxa are significantly different ($P < 0.05$) between the indicated bags.

BAG	EXPERIMENT 1	2	3	4	5	6	7	8	9	10	11
2	450.69 (12.90)	255.77 (10.60)	88.32 (2.13)	119.24 (8.09)	291.85 (99.07)	366.85 (8.08)	199.64 (20.36)	1267.97 (810.92)	1416.68 (312.58)	252.88 (18.69)	178.82 (22.10)
4	511.54 (123.52)	427.87 (91.36)	192.00 (15.66)	130.43 (33.40)	286.46 (79.37)	331.63 (14.59)	227.72 (33.50)	1098.42 (427.79)	914.38 (6.11)	245.29 (71.06)	171.41 (33.47)
6	---- ----	783.14 (74.63)	155.69 (22.50)	---- ----	367.42 (146.30)	368.43 (7.72)	307.09 (209.93)	2341.37 (10.10)	717.67 (210.68)	459.74 (383.68)	242.31 (58.91)
8	---- ----	803.32 (24.90)	226.08 (38.44)	---- ----	376.38 (61.86)	323.04 (70.96)	130.82 (21.98)	1780.85 (99.85)	926.39 (186.61)	357.93 (40.14)	348.17 (35.57)
10	---- ----	437.41 (39.84)	282.21 (27.70)	---- ----	183.72 (64.05)	428.49 (113.19)	117.56 (23.44)	1516.67 (718.45)	451.25 (27.41)	208.03 (14.15)	232.67 (8.22)
ALL	481.11 (79.85)	541.50 (231.15)	188.86 (71.21)	124.83 (20.86)	301.17 (102.05)	363.69 (59.64)	196.56 (102.29)	1601.05 (602.68)	885.27 (362.17)	304.77 (163.06)	234.67 (71.91)

Table 5.10 Initial zooplankton biomass (μg dry wt l^{-1}) in the grazed bags of the enclosure experiments. Tabled are the means (sd) for each grazed bag and for all grazed bags within each treatment.

BAG	EXPERIMENT 2	3	4	5	6	7	8	9	10	11
2	186.26 (24.41)	339.56 (30.24)	663.15 (5.52)	390.52 (153.00)	631.29 (1.26)	684.87 (73.71)	140.14 (1.65)	156.62 (52.54)	213.44 (31.03)	400.10 (28.23)
4	447.67 (84.99)	316.00 (62.30)	495.42 (104.99)	226.97 (22.73)	355.08 (52.77)	339.30 (62.75)	177.35 (24.25)	165.01 (3.83)	240.14 (11.71)	296.69 (7.62)
6	228.83 (65.67)	249.03 (74.68)	---- ----	608.79 (17.59)	730.68 (70.74)	346.54 (92.28)	159.18 (39.70)	98.82 (3.62)	173.66 (2.40)	559.50 (126.82)
8	278.31 (39.88)	462.55 (70.07)	---- ----	470.01 (43.23)	565.44 (52.61)	374.32 (21.52)	189.44 (18.95)	134.06 (8.97)	137.42 (1.58)	427.64 (20.24)
10	99.96 (12.25)	486.08 (70.53)	---- ----	256.87 (33.09)	584.97 (37.81)	392.12 (0.48)	230.28 (27.41)	134.75 (9.96)	165.93 (14.74)	605.60 (40.87)
ALL	248.21 (128.08)	370.64 (106.09)	579.29 (114.29)	390.63 (157.88)	573.49 (134.94)	427.43 (144.40)	179.28 (37.37)	137.85 (30.26)	186.12 (40.17)	457.90 (126.40)

Table 5.11 Final zooplankton biomass (μg dry wt l^{-1}) in the grazed bags of the enclosure experiments. Zooplankton from experiment 1 were not saved. Tabled are the means (sd) for each grazed bag and for all grazed bags within each experiment.

BAG	EXPERIMENT									
	2	3	4	5	6	7	8	9	10	11
1	13.14 (0.25)	---- ----	2.80 (0.97)	8.06 (2.08)	0.001 (0.00)	13.52 (6.00)	0.83 (0.30)	51.86 (0.05)	0.65 (0.12)	0.001 (0.00)
3	47.58 (26.47)	20.49 (12.20)	6.36 (0.88)	41.32 (9.23)	1.37 (1.82)	65.76 (11.72)	0.89 (0.26)	2.00 (0.18)	0.25 (0.12)	0.22 (0.04)
5	4.03 (0.49)	4.87 (0.47)	---- ----	34.67 (0.98)	2.33 (0.07)	8.08 (5.43)	0.24 (0.09)	---- ----	0.16 (0.00)	0.001 (0.00)
7	5.97 (0.67)	26.15 (9.20)	---- ----	10.83 (0.42)	0.06 (0.08)	0.05 (0.07)	2.90 (0.59)	1.47 (0.38)	1.55 (0.22)	0.68 (0.20)
9	4.27 (0.40)	4.95 (3.40)	---- ----	1.50 (0.30)	0.06 (0.08)	1.98 (0.06)	1.34 (0.15)	1.56 (0.11)	0.001 (0.00)	0.53 (0.22)
ALL	15.00 (19.62)	14.11 (11.68)	4.58 (2.19)	19.27 (16.87)	0.76 (1.16)	17.88 (26.16)	1.24 (1.77)	14.22 (23.38)	0.52 (0.74)	0.28 (0.46)

Table 5.12 Final zooplankton biomass (μg dry wt l^{-1}) in the ungrazed bags of the enclosure experiments. Zooplankton from experiment 1, experiment 3 bag 1 and experiment 9 bag 5 were not saved. Tabled are the means (sd) for each ungrazed bag and for all ungrazed bags within each experiment.

	EXPERIMENT	BAG
(a)	2	6 vs. 2,4,10 8 vs. 2,4,10
	8	4 vs. 6
(b)	2	4 vs. 2,10
	5	6 vs. 4,10
	6	4 vs. 2,6
	7	2 vs. others
	11	10 vs. 2,4,8 6 vs. 2,4
(c)	2	3 vs. others
	5	3 vs. 1,7,9 5 vs. 9
	7	3 vs. others
	9	1 vs. others

Table 5.13 Results of within experiment unplanned comparisons among (a) mean initial zooplankton biomass in the grazed treatments, (b) mean final zooplankton biomass in the grazed treatments, and (c) mean final zooplankton biomass in the ungrazed treatments of the enclosure experiments. Zooplankton biomass is significantly different ($P < 0.05$) between the indicated bags.

BAG	EXPERIMENT										
	1	2	3	4	5	6	7	8	9	10	11
2	2.42	4.89	5.66	7.86	0.93	0.74	1.37	0.40	0.09	2.52	41.40
4	1.02	0.82	6.77	10.06	1.08	1.07	2.93	0.31	0.11	1.13	139.32
6	----	1.27	11.71	----	1.03	0.49	2.56	0.17	0.11	2.42	163.58
8	----	1.27	4.65	----	0.92	0.80	1.61	0.23	0.12	0.83	145.20
10	----	2.61	5.29	----	8.22	1.29	7.50	0.20	0.19	2.92	224.66
MEAN	1.72	2.17	6.81	9.32	2.43	0.88	3.19	0.26	0.12	1.96	142.83

Table 5.14 Initial copepod biomass : cladoceran biomass for the grazed treatments of the enclosure experiments. Tabled are the ratios for individual bags and the mean for all bags within each experiment.

BAG	EXPERIMENT									
	2	3	4	5	6	7	8	9	10	11
2	10.20	2.29	1.33	0.67	0.35	0.26	17.36	0.62	0.37	1.99
4	2.98	1.57	2.42	0.64	0.23	2.13	2.40	0.41	0.32	4.29
6	3.51	2.84	----	0.32	0.46	0.39	37.24	0.71	0.57	1.21
8	10.36	1.56	----	0.38	0.15	0.63	2.13	0.48	0.80	2.50
10	∞	1.11	----	0.81	0.46	0.81	1.54	0.49	0.59	2.42
MEAN	6.76	1.87	1.88	0.56	0.33	0.85	12.13	0.54	0.53	2.48

Table 5.15 Final copepod biomass : cladoceran biomass for the grazed treatments of the enclosure experiments. Experiment 1 zooplankton were not saved. Tabled are the ratios for individual bags and the mean for all bags within each experiment.

TAXA	EXPERIMENT									
	2	3	4	5	6	7	8	9	10	11
Boeckella	0.48 (81)	2.96 (789)	8.91 (1845)	1.86 (771)	2.86 (423)	2.96 (551)	-0.30 (-2)	-0.15 (-12)	-0.35 (-39)	7.12 (1279)
Calamoecia	-15.94 (-38)	0.70 (15)	3.29 (35)	-3.94 (-31)	-9.00 (-55)	-2.84 (-32)	-11.74 (-45)	-2.74 (-50)	-8.68 (-56)	-3.73 (-15)
Copepodite	-1.24 (-15)	0.03 (6)	1.35 (29)	-3.65 (-33)	-0.64 (-4)	5.15 (147)	-24.01 (-95)	-3.76 (-93)	-6.20 (-95)	0.14 (23)
Nauplii	-12.37 (-27)	-10.67 (-50)	-20.78 (-71)	-31.98 (-89)	-32.30 (-83)	-23.10 (-75)	-18.18 (-89)	-8.65 (-48)	-9.66 (-82)	-88.61 (-95)
Daphnia	-5.86 (-73)	3.26 (357)	6.49 (2507)	3.24 (78)	7.55 (114)	6.21 (349)	-42.76 (-96)	-23.65 (-87)	-1.05 (17)	4.22 (2715)
Ceriodaphnia	-0.13 (-100)	-0.004 (-40)	0.36 (∞)	0.55 (230)	0.09 (68)	0.35 (118)	-0.60 (-72)	0.22 (30)	1.21 (102)	5.73 (772)
Diaphanosoma	-0.37 (-100)	-0.21 (-100)	0.14 (∞)	-0.20 (-68)	---- ----	---- ----	-0.18 (-100)	---- ----	---- ----	1.00 (100)
Moina	---- ----	---- ----	---- ----	---- ----	-0.02 (3)	-0.05 (-37)	-0.25 (-100)	-0.38 (-100)	-0.06 (-100)	---- ----
Chydorid	---- ----	5.86 (3700)	5.99 (∞)	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----	---- ----

Table 5.16 Mean change in zooplankton density (numbers l^{-1}) in the grazed treatments during the enclosure experiments. Percentage changes are in parenthesis. Taxa not present initially in the experiments are marked (∞).

	BAG	EXPERIMENT 1		2		3		4		5		6		7		8		9		10		11	
		I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F
(a)	1 x	0.62	2.32	0.89	2.59	1.19	1.70	1.37	1.58	3.90	1.64	2.50	0.77	3.06	1.22	1.61	1.22	1.40	1.67	1.70	0.39	4.97	6.04
	y	1.04	2.32	0.89	2.74	1.28	0.71	1.25	1.61	5.15	1.70	2.56	0.62	3.36	1.16	1.37	1.25	1.22	1.79	1.58	0.39	5.68	6.25
	3 x	1.25	1.96	0.98	4.79	1.13	1.04	1.46	2.65	4.82	2.41	2.29	0.74	3.09	1.28	1.31	3.27	1.37	1.55	1.58	0.39	4.94	8.69
	y	1.16	2.02	1.10	4.91	1.19	1.07	1.55	2.68	5.50	2.41	2.29	0.71	3.15	1.46	1.40	3.33	1.28	1.61	1.46	0.60	6.10	8.27
	5 x	----	----	1.16	1.34	1.04	0.92	----	----	4.67	2.17	2.23	0.60	4.25	1.49	1.13	0.98	1.34	----	1.67	0.54	5.62	8.33
	y	----	----	1.04	1.37	1.31	0.86	----	----	4.14	2.11	2.29	0.45	4.52	1.76	1.22	0.95	1.52	----	1.34	0.57	5.50	9.52
	7 x	----	----	1.10	2.47	1.16	1.37	----	----	3.15	1.84	2.38	0.80	3.66	0.65	1.07	1.61	1.19	0.71	1.67	0.51	7.20	11.6
	y	----	----	0.98	2.47	1.25	1.34	----	----	3.57	1.79	2.26	0.83	4.02	0.68	1.04	1.73	1.31	0.54	1.79	0.51	6.99	11.8
	9 x	----	----	1.22	1.34	1.16	0.68	----	----	2.29	1.04	2.26	0.71	3.63	1.01	0.95	2.32	1.19	0.68	1.67	0.45	6.69	12.7
	y	----	----	1.19	1.25	1.19	0.80	----	----	2.56	1.16	2.44	0.54	3.99	1.07	0.98	2.65	1.34	0.62	1.52	0.48	7.44	13.6
	Mean	1.02	2.16	1.06	2.53	1.19	1.15	1.41	2.13	3.98	1.83	2.35	0.68	3.67	1.18	1.21	1.93	1.32	1.15	1.60	0.48	6.11	9.68
	se	0.14	0.10	0.04	0.43	0.02	0.12	0.06	0.31	0.34	0.15	0.04	0.04	0.16	0.11	0.07	0.29	0.03	0.19	0.04	0.02	0.29	0.83
(b)	2 x	0.98	1.16	----	1.31	1.19	1.37	1.43	1.55	4.17	1.46	2.53	0.57	3.39	0.74	1.43	2.80	1.37	1.49	1.64	0.54	5.50	3.87
	y	1.10	0.89	----	1.19	1.19	1.40	1.34	1.52	4.28	1.58	2.53	0.54	3.36	0.68	1.28	3.33	1.31	1.43	1.64	0.57	5.38	4.37
	4 x	1.16	1.10	1.16	1.01	1.31	0.60	1.49	0.89	3.78	2.29	2.38	0.57	3.39	0.71	1.37	0.39	1.34	1.52	1.70	0.57	5.47	4.97
	y	1.07	1.04	0.92	0.92	1.28	0.45	1.70	0.86	3.60	2.62	2.23	0.60	3.00	0.74	1.34	0.36	1.40	2.11	1.61	0.62	5.50	4.97
	6 x	----	----	1.10	2.56	1.16	0.51	----	----	4.37	1.13	2.20	0.62	3.69	1.25	1.37	0.45	1.58	0.95	1.58	0.60	6.96	4.46
	y	----	----	0.98	2.68	1.22	0.45	----	----	3.75	1.10	2.38	0.62	3.96	1.34	1.25	0.42	1.55	0.98	1.79	0.60	7.05	4.79
	8 x	----	----	1.13	1.84	1.19	1.16	----	----	2.53	1.19	2.38	0.83	3.81	0.80	1.04	1.40	1.28	1.34	1.93	0.74	6.87	6.66
	y	----	----	----	1.84	1.25	1.16	----	----	3.18	0.98	2.26	0.83	4.02	0.60	0.92	1.55	1.25	1.28	1.93	0.74	6.66	7.32
	10x	----	----	1.31	0.98	1.25	0.83	----	----	2.44	1.64	2.41	0.01	3.81	0.54	1.04	1.67	1.34	1.19	1.64	0.60	7.08	4.73
	y	----	----	1.07	0.80	1.22	0.54	----	----	2.50	1.70	2.53	1.01	4.17	0.60	1.07	1.90	1.28	0.98	1.67	0.74	6.99	4.55
	Mean	1.08	1.05	1.10	1.51	1.23	0.85	1.49	1.21	3.46	1.57	2.38	0.72	3.66	0.80	1.21	1.43	1.37	1.33	1.71	0.63	6.35	5.07
	se	0.04	0.06	0.05	0.22	0.01	0.12	0.08	0.19	0.24	0.17	0.04	0.06	0.12	0.09	0.06	0.33	0.04	0.11	0.04	0.02	0.24	0.34
	MEAN	1.05	1.60	1.07	2.02	1.21	0.95	1.45	1.67	3.72	1.70	2.37	0.70	3.67	0.99	1.21	1.68	1.34	1.25	1.66	0.56	6.23	7.37
	se	0.07	0.22	0.03	0.26	0.01	0.08	0.05	0.24	0.21	0.11	0.03	0.03	0.10	0.08	0.04	0.22	0.02	0.10	0.03	0.02	0.19	0.69

Table 5.17 Initial [I] and final [F] chlorophyll *a* concentrations ($\mu g\ l^{-1}$) for the (a) ungrazed and (b) grazed treatments in the enclosure experiments. Duplicate determinations (x and y) from each bag and the mean and (se) for each treatment and for each experiment are tabled.

	INITIAL		FINAL	
EXPERIMENT	TREATMENT	BAG	TREATMENT	BAG
1	0.14 (1,2) ns	2.33 (2,4) ns	41.00 (1,2) *	6.00 (2,4) ns
2	0.31 (1,7) ns	1.75 (7,8) ns	1.98 (1,8) ns	433.33 (8,10) ***
3	3.50 (1,8) ns	0.38 (8,10) ns	0.92 (1,8) ns	3.98 (8,10) *
4	0.34 (1,2) ns	4.43 (2,4) ns	2.17 (1,2) ns	1582.00 (2,4) ***
5	0.76 (1,8) ns	10.26 (8,10) ***	0.60 (1,8) ns	56.84 (8,10) ***
6	0.26 (1,8) ns	3.32 (8,10) *	0.18 (1,8) ns	12.50 (8,10) ***
7	0.003 (1,8) ns	9.59 (8,10) ***	3.40 (1,8) ns	23.35 (8,10) ***
8	0.001 (1,8) ns	11.14 (8,10) ***	0.59 (1,8) ns	89.29 (8,10) ***
9	0.82 (1,8) ns	3.00 (8,10) ns	0.34 (1,7) ns	17.08 (7,9) ***
10	2.82 (1,8) ns	2.13 (8,10) ns	12.16 (1,8) **	2.28 (8,10) ns
11	0.19 (1,8) ns	11.41 (8,10) ***	11.96 (1,8) **	53.83 (8,10) ***

Table 5.18 Results of nested ANOVA on initial and final chlorophyll *a* concentrations in the enclosure experiments. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

EXPERIMENT	BAG
5	9 vs. 1,3,5 7 vs. 3 2 vs. 10
6	No significant differences between bags
7	5 vs. 1,3
8	9 vs. 1,3 7 vs. 1 8 vs. 2,4,6
11	7 vs. 1,3,5 9 vs. 1,3,5 2 vs. 6,10 4 vs. 6,10

Table 5.19 Results of within treatment unplanned comparisons among mean initial chlorophyll *a* concentrations in the enclosure experiments. Chlorophyll *a* concentrations are significantly different ($P < 0.05$) between the indicated bags.

EXPERIMENT	BAG
2	1 vs. 3,5,9 3 vs. 5,7,9 5 vs. 7 7 vs. 9
	2 vs. 6,8,10 4 vs. 6,8 6 vs. 8,10 8 vs. 10
3	No significant differences between bags
4	1 vs. 3
	2 vs. 4
5	9 vs. 1,3,5,7 1 vs. 3,5 3 vs. 7
	2 vs. 4,6,8 4 vs. 6,8,10 10 vs. 6,8
6	5 vs. 7
	10 vs. 2,4,6 2 vs. 8
7	7 vs. 1,3,5,9 5 vs. 1,9
	6 vs. 2,4,8,10
8	9 vs. 1,3,5,7 3 vs. 1,5,7 5 vs. 7
	2 vs. 4,6,8,10 4 vs. 8,10 6 vs. 8,10
9	1 vs. 5,7 3 vs. 5,7
	2 vs. 4,8
11	1 vs. 3,5,7,9 3 vs. 7,9 5 vs. 7,9
	8 vs. 2,4,6,10

Table 5.20 Results of within treatment unplanned comparisons among mean final chlorophyll *a* concentrations in the enclosure experiments. Chlorophyll *a* concentrations are significantly different ($P < 0.05$) between the indicated bags.

BAG		EXPERIMENT 1	2	3	4	5	6	7	8	9	10	11
(a)	1	0.103	0.110	-0.003	0.018	-0.100	-0.117	-0.088	-0.017	0.020	-0.131	0.011
	3	0.050	0.154	-0.007	0.052	-0.076	-0.104	-0.075	0.081	0.012	-0.101	0.033
	5	-----	0.021	-0.022	-----	-0.072	-0.132	-0.090	-0.018	-----	-0.090	0.036
	7	-----	0.086	0.009	-----	-0.061	-0.095	-0.159	0.041	-0.049	-0.111	0.038
	9	-----	0.007	-0.036	-----	-0.079	-0.120	-0.118	0.086	-0.048	-0.111	0.048
	Mean	0.077	0.076	-0.012	0.035	-0.078	-0.114	-0.106	-0.035	-0.016	-0.109	0.033
	se	(0.027)	(0.028)	(0.008)	(0.017)	(0.006)	(0.006)	(0.015)	(0.023)	(0.019)	(0.007)	(0.006)
(b)	2	-0.001	0.015	0.012	0.009	-0.102	-0.137	-0.142	0.074	0.006	-0.098	-0.021
	4	-0.005	-0.007	-0.069	-0.054	-0.041	-0.124	-0.134	-0.116	0.020	-0.093	-0.008
	6	-----	0.092	-0.070	-----	-0.129	-0.119	-0.098	-0.099	-0.034	-0.094	-0.032
	8	-----	0.049	-0.004	-----	-0.096	-0.093	-0.157	0.037	0.002	-0.087	0.002
	10	-----	-0.029	-0.045	-----	-0.039	-0.081	-0.177	0.048	-0.013	-0.082	-0.032
	Mean	-0.003	0.024	-0.035	-0.023	-0.081	-0.111	-0.142	-0.011	-0.004	-0.091	-0.018
	se	(0.002)	(0.021)	(0.017)	(0.032)	(0.018)	(0.010)	(0.013)	(0.040)	(0.009)	(0.003)	(0.007)
Mt Bold		0.049	0.188	-0.154	0.046	-0.076	-0.111	-0.047	0.075	0.017	-0.001	-0.040

Table 5.21 Net changes in chlorophyll *a* concentration (ln units d^{-1}) in the bags during the enclosure experiments. Tabled are individual bag values and the mean (se) for the (a) ungrazed and (b) grazed treatments. Chlorophyll *a* changes in Mt Bold Reservoir during the same periods are also tabled.

EXPERIMENT	F	(df)	sig.
1	10.74	(1,2)	ns
2	1.99	(1,8)	ns
3	1.17	(1,8)	ns
4	2.70	(1,2)	ns
5	0.25	(1,8)	ns
6	0.003	(1,8)	ns
7	1.32	(1,8)	ns
8	0.85	(1,8)	ns
9	0.10	(1,7)	ns
10	0.10	(1,8)	ns
11	22.75	(1,8)	**

Table 5.22 Results of one level ANOVA on the change in chlorophyll *a* concentration in the enclosure experiments.

	BAG		EXPERIMENT 1		2		3		4		5		6		7		8		9		10		11	
			I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F
(a)	1	x	0.91	1.56	1.50	1.36	1.60	1.39	1.21	1.51	1.56	1.49	----	1.37	1.49	1.37	1.54	1.52	1.47	1.56	1.50	1.44	2.20	1.47
		y	1.52	1.63	1.43	1.44	1.59	1.26	0.98	1.59	1.56	1.46	----	1.40	1.57	1.39	1.53	1.56	1.46	1.54	1.51	1.44	1.44	1.41
	3	x	1.56	1.61	1.43	1.58	1.46	1.40	1.11	1.59	1.51	1.50	----	1.39	1.51	1.43	1.52	1.53	1.48	1.58	1.51	1.44	1.46	1.45
		y	1.63	1.70	1.68	1.56	1.48	1.33	1.08	1.55	1.68	1.50	----	1.41	1.56	1.48	1.47	1.49	1.39	1.54	1.53	1.43	1.47	1.42
	5	x	----	----	1.34	1.41	1.52	1.41	----	----	1.54	1.62	----	1.25	1.57	1.47	1.46	1.27	1.36	----	1.51	1.50	1.47	1.46
		y	----	----	1.67	1.44	1.52	1.38	----	----	1.53	1.51	----	1.50	1.60	1.48	1.46	1.33	1.46	----	1.41	1.36	1.43	1.47
	7	x	----	----	1.54	1.41	1.50	1.44	----	----	1.51	1.55	----	1.35	1.56	1.22	1.57	1.46	1.54	1.60	1.51	1.55	1.48	1.47
		y	----	----	1.65	1.48	1.56	1.36	----	----	1.56	1.50	----	1.56	1.57	1.53	1.46	1.45	1.52	1.64	1.46	1.55	1.52	1.48
	9	x	----	----	1.64	1.45	1.44	1.35	----	----	1.57	1.52	----	1.33	1.53	1.48	1.60	1.44	1.48	1.64	1.44	1.36	1.58	1.45
		y	----	----	1.43	1.40	1.54	1.29	----	----	1.56	1.70	----	1.38	1.60	1.57	1.50	1.46	1.50	1.62	1.38	1.60	1.52	1.49
	Mean		1.41	1.63	1.53	1.45	1.52	1.36	1.10	1.56	1.56	1.54	----	1.39	1.56	1.44	1.51	1.45	1.47	1.59	1.48	1.47	1.49	1.46
	se		0.08	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	----	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
(b)	2	x	1.57	1.56	----	1.47	1.48	1.48	1.17	1.63	1.56	1.48	----	1.36	1.52	1.47	1.55	1.47	1.44	1.52	1.53	1.50	1.39	1.30
		y	1.42	1.58	----	1.48	1.54	1.31	1.05	1.59	1.52	1.47	----	1.50	1.55	1.53	1.48	1.47	1.42	1.55	1.53	1.46	1.39	1.36
	4	x	1.63	1.54	1.63	1.48	1.52	1.33	1.09	1.58	1.51	1.48	----	1.19	1.56	1.41	1.53	1.30	1.50	1.55	1.50	0.76	1.45	1.31
		y	1.06	1.59	1.72	1.48	1.48	0.68	1.06	1.53	1.51	1.49	----	1.43	1.53	1.32	1.45	1.20	1.52	1.54	1.54	1.62	1.42	1.33
	6	x	----	----	1.48	1.43	1.63	1.42	----	----	1.60	1.52	----	1.24	1.59	1.40	1.53	1.36	1.43	1.60	1.51	1.67	1.48	1.30
		y	----	----	1.43	1.38	1.53	1.36	----	----	1.52	1.48	----	1.40	1.58	1.41	1.62	1.27	1.53	1.65	1.50	1.54	1.52	1.29
	8	x	----	----	1.58	1.51	1.54	1.39	----	----	1.39	1.54	----	1.47	1.54	1.59	1.52	1.42	1.48	1.55	1.48	1.56	1.52	1.37
		y	----	----	----	1.48	1.56	1.30	----	----	1.55	1.43	----	1.65	1.53	1.43	1.55	1.33	1.56	1.65	1.30	1.56	1.64	1.36
	10	x	----	----	1.52	1.38	1.62	1.33	----	----	1.58	1.57	----	1.36	1.52	1.20	1.46	1.51	1.45	1.48	1.45	1.67	1.51	1.29
		y	----	----	1.38	1.59	1.58	1.50	----	----	1.53	1.50	----	1.42	1.54	1.43	1.50	1.60	1.54	1.38	1.40	1.47	1.62	1.28
	Mean		1.42	1.57	1.53	1.47	1.55	1.38	1.09	1.58	1.53	1.50	----	1.40	1.55	1.42	1.52	1.39	1.49	1.55	1.37	1.56	1.49	1.32
	se		0.06	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.01	0.01	0.01

Table 5.23 Initial [I] and final [F] chlorophyll *a* : phaeophytin *a* ratios for the (a) ungrazed and (b) grazed treatments in the enclosure experiments. Duplicate determinations (x and y) from each bag and the mean and (se) for each treatment are tabled.

	INITIAL		FINAL	
EXPERIMENT	TREATMENT	BAG	TREATMENT	BAG
1	0.01 (1,2) ns	0.92 (2,4) ns	3.65 (1,2) ns	0.91 (2,4) ns
2	0.004 (1,7) ns	0.77 (7,8) ns	0.20 (1,8) ns	1.86 (8,10) ns
3	0.87 (1,8) ns	2.65 (8,10) ns	0.71 (1,8) ns	0.43 (8,9) ns
4	0.57 (1,2) ns	1.86 (2,3) ns	0.59 (1,2) ns	1.13 (2,4) ns
5	2.39 (1,8) ns	0.59 (8,10) ns	2.24 (1,8) ns	1.02 (8,10) ns
6	--------------	--------------	1.01 (1,8) ns	0.95 (8,10) ns
7	0.48 (1,8) ns	1.20 (8,10) ns	0.23 (1,8) ns	1.15 (8,10) ns
8	1.05 (1,8) ns	1.20 (8,10) ns	0.72 (1,8) ns	11.22 (8,10) ***
9	0.64 (1,8) ns	1.55 (8,10) ns	1.04 (1,7) ns	5.19 (7,9) **
10	0.003 (1,8) ns	2.18 (8,10) ns	8.15 (1,8) *	0.68 (8,9) ns
11	0.04 (1,8) ns	4.23 (8,9) *	71.86 (1,8) ***	2.50 (8,10) ns

Table 5.24 Results of nested ANOVA on initial and final chlorophyll *a* : phaeophytin *a* ratios in the enclosure experiments. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

EXPERIMENT	BAG
8 Final	5 vs. 1,3 2 vs. 4 10 vs. 4,6,8
9 Final	10 vs. 6,8
11 Initial	2 vs. 8

Table 5.25 Results of within treatment unplanned comparisons among mean chlorophyll *a* : phaeophytin *a* ratios in the enclosure experiments. Chlorophyll *a* : phaeophytin *a* ratios are significantly different ($P < 0.05$) between the indicated bags.

TREATMENT	EXPERIMENT										
	1	2	3	4	5	6	7	8	9	10	11
Initial	16	13	19	15	19	20	19	23	19	18	21
Final Ungrazed	25	27	25	20	26	29	28	28	25	28	27
Final Grazed	20	24	22	21	27	28	29	27	26	25	25
Initial vs. Final Ungrazed	14	12	15	11	18	20	19	23	18	17	20
Initial vs. Final Grazed	13	12	13	10	18	20	19	22	19	17	18
Final Ungrazed vs. Final Grazed	19	23	21	17	26	28	27	25	24	24	25

Table 5.26 Numbers of phytoplankton taxa scored initially and finally in the enclosure experiments. Also tabled are the numbers of taxa shared between the various treatments.

TREATMENT	EXPERIMENT										
	1	2	3	4	5	6	7	8	9	10	11
Initial	2.9125	2.9286	2.9248	2.7183	2.6033	2.9701	3.2939	3.0131	3.0021	2.9681	3.3231
Final Ungrazed	3.4909	3.1788	3.4931	3.2739	3.4406	3.8062	4.0166	3.5476	2.9092	2.9607	3.6708
Final Grazed	3.1475	3.3748	3.3583	2.8247	3.2439	3.4602	3.7596	3.2522	3.2943	2.8359	3.4612

Table 5.27 Mean Shannon Wiener diversity for the initial, final ungrazed and final grazed phytoplankton in the enclosure experiments.

EXPERIMENT	TREATMENT			BAG		
1	8.26	(2,5)	*	1.39	(5,8)	ns
2	4.61	(2,8)	*	3.28	(8,10)	*
3	3.10	(2,8)	ns	2.54	(8,11)	ns
4	4.62	(2,2)	ns	53.05	(2,5)	***
5	8.96	(2,8)	**	4.24	(8,11)	*
6	17.96	(2,8)	**	1.63	(8,11)	ns
7	27.07	(2,8)	***	1.21	(8,11)	ns
8	6.57	(2,17)	**	4.24	(17,20)	**
9	3.23	(2,6)	ns	0.54	(6,6)	ns
10	0.52	(2,7)	ns	2.86	(7,9)	ns
11	4.19	(2,8)	ns	0.73	(8,5)	ns

Table 5.28 Results of nested ANOVA on phytoplankton diversity in the enclosure experiments. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

EXPERIMENT	TREATMENT	BAG
1	Initial vs. Ungrazed	-----
2	No significant differences	No significant differences
4	-----	1 vs. 3 2 vs. 4
5	Initial vs. Ungrazed	4 vs. 8
6	Initial vs. Ungrazed	-----
7	Initial vs. Ungrazed	-----
8	Initial vs. Ungrazed	4 vs. 2,8,10

Table 5.29 Results of unplanned comparisons among mean phytoplankton diversities in the enclosure experiments. Phytoplankton diversities are significantly different ($P < 0.05$) between the indicated treatments or bags within treatments.

TREATMENT	EXPERIMENT										
	1	2	3	4	5	6	7	8	9	10	11
Initial	0.7281	0.7914	0.6885	0.6958	0.6128	0.6872	0.7754	0.6661	0.7067	0.7118	0.7566
Final Ungrazed	0.7517	0.6685	0.7522	0.7575	0.7320	0.7835	0.8355	0.7380	0.6265	0.6159	0.7720
Final Grazed	0.7283	0.7361	0.7531	0.6431	0.6822	0.7198	0.7739	0.6840	0.7008	0.6107	0.7518

Table 5.30 Mean evenness of phytoplankton taxa frequencies for the initial and final treatments in the enclosure experiments.

CHLOROPHYTA

(AN) Ankistrodesmus
(CL) Closteriopsis
(OO) Oocystis
(SS) Schroederia
(TS) Schroederia straight
(SP) Sphaerocystis
(SR) Staurastrum

CHRYSOPHYTA

Chrysophyceae

(OM) Ochromonas

Bacillariophyceae

(GP) Gomphonema
(CY) Cyclotella sp.
(CM) Cyclotella meneghiniana
(MV) Melosira
(DS) centric diatom
(P1,P2,P3,P4,P5,L1,L2,DB,PT,DE) pennate diatoms

CYANOBACTERIA

(MA) Microcystis aeruginosa
(CN) Cyanarcus

CRYPTOPHYTA

(CO) Cryptomonas

Unidentified Flagellates (F0,F1,F2,F3,CS)

Unidentified Spherical Cells (SM,LS)

Table 5.31 Phytoplankton taxa recorded in the enclosure experiments. Codes used are in parenthesis.

GALD	EXPERIMENT																					
	1		2		3		4		5		6		7		8		9		10		11	
(μm)	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G
1-10	71.4	17.1	80.3	14.8	50.4	9.8	50.8	4.0	66.6	53.3	37.8	13.4	34.5	8.4	41.2	3.6	15.2	10.9	11.0	5.1	29.9	6.9
11-20	50.3	18.7	49.3	10.8	22.5	4.0	56.3	10.0	35.2	50.9	41.9	23.5	28.4	18.2	21.0	18.6	12.8	14.1	17.4	14.3	83.4	43.3
21-30	15.7	17.8	17.6	23.8	36.9	32.0	34.3	36.0	49.5	37.3	62.6	25.9	40.7	27.2	23.5	21.4	43.8	41.0	30.4	29.4	21.9	12.3
31-40	1.8	1.5	2.2	1.8	6.9	5.8	4.8	2.3	0.8	1.0	0.6	0.5	1.4	1.0	0.6	0.5	0.2	0.3	0.6	0.9	0.1	0.3
41-50	2.6	0.3	3.2	0.9	17.3	8.9	11.3	3.5	1.0	1.4	0.5	0.5	5.8	2.9	1.0	0.5	0.4	0.6	0.5	0.3	0.6	0.3
51-60	18.0	2.5	6.8	4.7	20.1	16.5	38.5	13.5	10.0	5.6	11.1	13.7	20.6	5.4	1.9	4.8	2.4	5.9	1.2	3.7	6.1	5.1
71-80	3.3	1.5	2.4	3.2	5.0	2.9	6.5	1.5	6.3	8.4	31.9	36.3	20.7	17.4	1.6	13.9	4.0	16.4	5.3	7.0	16.6	10.3
101-110	10.0	4.5	10.8	9.2	14.9	12.5	28.8	5.8	6.6	2.6	5.8	5.1	7.8	2.7	1.0	0.9	0.8	0.9	0.9	0.6	5.9	0.1
121-130	6.8	2.0	5.3	5.3	11.4	7.9	14.5	1.5	3.7	1.1	0.6	1.9	2.8	2.1	0.2	0.2	0.2	0.3	0.2	0.0	2.4	0.3
Total	179.9	65.9	177.9	74.5	185.4	100.3	245.7	78.1	179.7	161.6	192.8	120.8	162.7	85.3	92.0	64.4	79.8	90.4	67.5	61.3	166.9	78.9
	ns		***		***		***		ns		**		ns		***		ns		ns		ns	

Table 5.32 Summed mean frequencies of the phytoplankton taxa within GALD size classes. Tabled are the frequencies within each size class and the totals for ungrazed [U] and grazed [G] treatments of all enclosure experiments. The significance levels for comparisons between the treatments are shown.

VOLUME	EXPERIMENT																					
	1		2		3		4		5		6		7		8		9		10		11	
(μm^3)	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G	U	G
10-50	42.8	27.0	37.9	18.0	14.4	6.7	6.0	5.0	56.4	76.4	22.6	24.3	14.7	10.7	18.4	6.1	15.6	10.6	17.6	13.0	11.7	12.6
51-100	49.3	0.3	49.8	1.0	44.8	5.2	49.5	2.5	36.5	23.5	27.8	6.9	27.3	4.2	26.8	0.5	0.6	0.4	0.9	0.1	24.3	0.3
101-200	5.3	3.5	3.9	3.6	7.1	6.8	6.8	1.5	4.7	3.2	2.5	3.6	5.2	3.8	0.8	3.3	0.2	2.3	0.7	0.3	2.1	3.0
201-400	25.8	6.5	12.4	7.3	33.6	23.4	49.5	17.0	11.0	7.5	13.8	15.5	30.1	10.8	4.7	8.8	12.2	22.9	7.6	9.8	12.4	10.4
401-800	10.3	2.8	10.2	4.4	17.6	10.9	20.0	3.5	8.7	9.0	37.8	36.6	22.2	20.6	2.8	12.9	1.4	8.9	3.6	3.4	16.7	8.0
801-1900	28.0	7.3	43.8	12.0	24.6	13.6	71.3	11.0	18.8	8.2	20.7	8.4	24.6	9.9	8.9	4.3	4.2	3.9	6.5	3.7	22.2	1.9
1901-3200	6.8	2.0	5.3	5.3	11.4	7.9	14.5	1.5	3.7	1.1	0.6	1.9	2.8	2.1	0.2	0.2	0.2	0.3	0.2	0.0	2.4	0.3
3201-6400	5.5	2.3	3.7	2.9	7.6	2.4	2.8	2.0	6.7	3.2	53.1	5.8	21.7	4.5	17.0	12.7	3.4	4.3	3.0	2.7	71.1	36.0
6401-1000	5.8	14.0	10.9	19.9	24.3	23.4	25.3	34.0	33.2	29.5	13.9	17.8	14.1	18.7	12.4	15.6	42.0	36.9	27.3	28.1	3.9	6.4
Total	179.9	65.9	177.9	74.5	185.4	100.3	245.7	78.1	179.7	161.6	192.8	120.8	162.7	85.3	92.0	64.4	79.8	90.4	67.5	61.3	166.9	78.9
	ns		***		**		***		*		*		ns		***		ns		ns		ns	

Table 5.33 Summed mean frequencies of the phytoplankton taxa within volume size classes. Tabled are the frequencies within each size class and the totals for ungrazed [U] and grazed [G] treatments of all enclosure experiments. The significance levels for comparisons between the treatments are shown.

TAXA	EXPERIMENT										
	1	2	3	4	5	6	7	8	9	10	11
OO	0.56	0.70	0.96	0.75	1.11	0.81	0.77	0.92	1.13	1.00	0.58
SP	0.15*	0.21*	19.0*	0.50	1.32	0.60	0.64	0.35	1.17	0.20	0.65
SS	1.40	1.72	3.71*	1.46	1.20	1.20	1.21	1.54	2.32	0.75	1.39
TS	----	----	----	----	0.29*	0.58	0.67	0.80	0.80	0	----
CN	----	----	1.00	----	----	----	----	----	----	----	----
AN	8.00*	0.02	∞	0	0.38	0.67	∞ *	2.00	0.36	1.08	0.71
CS	∞ *	∞ *	∞ *	∞	3.00*	13.4*	12.5*	∞ *	----	----	20.4*
F0	----	∞	----	----	----	17.0*	0	----	----	----	----
F1	3.71*	4.81*	13.0*	8.25*	4.00	4.62*	1.03	2.57*	1.00	2.70	2.73*
F2	6.36*	11.7*	8.73*	8.50*	2.08*	3.83*	0.91	1.68	1.09	1.85	10.2*
F3	7.00*	3.18*	∞	∞	5.14*	14.8*	4.21*	6.00*	0.96	2.81	7.09*
SM	1.28	2.34*	1.23	0.83	1.01	1.30	2.72	7.44*	3.35*	2.25*	0.76
CL	0.50	0.77	----	----	0.11	0.40	1.79	0.35	0.42	1.00	1.17
CO	∞	∞	∞	0	2.26*	6.33*	4.57*	4.11*	1.60	1.40	2.07
OM	∞	0.89	----	----	0.67	0.67	0.68	2.20	0	∞	∞
MA	∞	0.91	0	----	----	1.43	23.0*	5.80*	3.20*	7.04*	2.23*
GP	0.50	0.51	1.05	0.40	0.63	1.00	0.38	0.80	0.80	0.70	0.48
CY	193.0*	112.5*	8.62*	19.8*	1.94	4.96*	11.3*	∞ *	4.62	4.29	82.8*
CM	3.00	0.91	9.00*	0	0.43	4.60*	4.69*	0.82	1.10	0.60	1.53*
P1	1.50	1.10	1.05	4.50*	1.47	0.69	1.37	0.24	0.09*	2.41	0.71
P2	7.20*	1.46	1.22	2.85*	1.79*	0.81	3.81	0.40	0.41	0.32*	1.19
P3	3.00	0.74	1.72	4.33*	0.83	0.90	1.09	0.06	0.03*	0.22*	1.91*
P4	2.22*	1.17	1.19	5.00*	2.54*	1.14	2.89	1.11	0.91	1.58	41.9*
P5	3.38*	0.99	1.44	9.67*	3.36*	0.32	1.33	1.00	0.80	∞	8.38*
L1	∞	∞ *	1.27	4.25*	1.50	∞	5.50	∞	----	0.71	----
L2	∞	2.73	1.49	4.50	0.67	0.67	1.17	0.75	0.32	2.14	1.97
DB	7.00*	4.11*	2.75	2.70	0.75	1.50	3.36*	7.00	∞	1.43	----
PT	----	0	0.71	∞ *	0.25	1.50	0	0	----	∞	∞
DE	----	----	1.00	----	----	----	----	----	----	----	----
DS	0	0.45	1.50	3.00	2.33	8.67*	13.3*	1.05	0.27	0.47	1.92*
MV	----	----	----	0	0	0.33*	2.00	0.67	0	∞	2.66*
LS	1.46	0.90	----	----	----	----	1.00	0.77	0.74	1.23	1.25
SR	----	----	----	----	----	----	----	0	1.28	0.02	0.10

Table 5.34 Response of phytoplankton taxa to zooplankton. The ratios of the mean ungrazed frequency over the mean grazed frequency for each taxa in all experiments are tabled. Ratios significant by ANOVA are marked *.

EXPERIMENT	INITIAL		UNGRAZED		GRAZED		ORDER
	REP	DISS	REP	DISS	REP	DISS	
1	0/4	0.23	2/2	0.25	2/2	0.44	(GI)U
2	1/1	0.25	5/5	0.23	2/5	0.45	(GI)U
3	1/1	0.24	4/5	0.34	1/5	0.28	(GU)I
4	1/1	0.26	2/2	0.17	1/2	0.31	(GI)U
5	1/1	0.20	3/5	0.50	5/5	0.41	(GU)I
6	1/1	0.21	2/5	0.25	3/5	0.32	(GU)I
7	1/1	0.16	4/5	0.35	1/5	0.38	(GU)I
8	1/10	0.31	4/5	0.46	3/5	0.72	(GUI)
9	0/1	0.33	1/2	0.44	0/3	0.39	(GUI)
10	1/1	0.18	1/5	0.35	0/3	0.33	(GU)I
11	1/1	0.16	0/2	0.28	1/2	0.48	(GU)I

Table 5.35 Results of hierarchical classification of the individual enclosure experiments using phytoplankton composition. Tabled is the proportion of paired replicates [REP] and the highest common dissimilarity [DISS] score for the initial [I], ungrazed [U] and grazed [G] groups. Also shown is the order in which these groups are joined.

	25.I.84	3.II.84	10.II.84
Food Types X Replicates	3 X 2	3 X 3	4 X 3
Zooplankton (groups X animals)			
Boeckella	2 X 7-20	3 X 20	2 X 5-10
Calamoecia	2 X 50	1 X 20	3 X 20
Ceriodaphnia	2 X 50	1 X 20	2 X 20
Diaphanosoma	1 X 14-20	1 X 20	1 X 5-15
Bosmina	1 X 6-12	-----	-----
Daphnia 1 mm	1 X 10-22	1 X 6-10	1-3 X 4-10
Daphnia 2 mm	-----	-----	1 X 4-10
Daphnia 2.5 mm	-----	-----	0-1 X 3-10
Daphnia 3 mm	-----	-----	0-2 X 3-10
Cyclopiod	1 X 12-20	1 X 14-20	1 X 10-20

Table 6.1 Numbers of food tracer types, replicates, groups and animals for the three experiments examining *in situ* zooplankton grazing rates.

TAXA	25.I.84 TOTAL	25.I.84 NANNO	25.I.84 NET	3.II.84 TOTAL	3.II.84 NANNO	3.II.84 NET	10.II.84 TOTAL	10.II.84 NANNO	10.II.84 NET	10.II.84 ULTRA
Boeckella	$1.23+/-0.06^{a}_{1}$	$0.96+/-0.10_{1}$	$0.92+/-0.18_{1}$	$0.71+/-0.09^{a}_{12}$	$0.97+/-0.04_{1}$	$0.65+/-0.21_{2}$	$0.46+/-0.14^{bc}_{1}$	$0.82+/-0.15_{1}$	$0.58+/-0.19_{1}$	-----------
Calamoecia	$0.16+/-0.01^{b}_{1}$	$0.10+/-0.01_{2}$	$0.12+/-0.01_{2}$	$0.08+/-0.02^{b}_{1}$	$0.23+/-0.09_{1}$	$0.28+/-0.19_{1}$	$0.06+/-0.01^{d}_{1}$	$0.06+/-0.01_{1}$	$0.06+/-0.01_{1}$	-----------
Ceriodaphnia	$0.12+/-0.01^{b}_{1}$	$0.15+/-0.03_{1}$	$0.14+/-0.02_{1}$	$0.10+/-0.02^{b}_{1}$	$0.08+/-0.01_{1}$	$0.05+/-0.01_{2}$	$0.05+/-0.01^{d}_{1}$	$0.10+/-0.04_{1}$	$0.05+/-0.01_{1}$	-----------
Diaphanosoma	$0.04+/-0.01^{c}_{1}$	$0.05+/-0_{1}$	$0.04+/-0.01_{1}$	$0.15+/-0.02^{b}_{1}$	$0.14+/-0.02_{1}$	$0.05+/-0.01_{2}$	$0.17+/-0.09^{bcd}_{1}$	$0.08+/-0.01_{1}$	$0.01+/-0.01_{2}$	-----------
Bosmina	$0.05+/-0^{c}_{1}$	$0.06+/-0.03_{1}$	$0.10+/-0.07_{1}$	-----------	-----------	-----------	-----------	-----------	-----------	-----------
Daphnia 1 mm	$0.17+/-0.08^{b}_{1}$	$0.12+/-0.02_{1}$	$0.06+/-0.01_{1}$	$0.18+/-0.04^{b}_{1}$	$0.18+/-0.02_{1}$	$0.08+/-0_{(2)}$	$0.11+/-0.02^{cd}_{1}$	$0.28+/-0.09_{1}$	$0.11+/-0.05_{1}$	$0.24+/-0.12_{1}$
Daphnia 2 mm	-----------	-----------	-----------	-----------	-----------	-----------	$0.85+/-0.26^{ab}_{2}$	$1.11+/-0.18_{12}$	$0.83+/-0.23_{2}$	$2.72+/-0.27_{1}$
Daphnia 2.5 mm	-----------	-----------	-----------	-----------	-----------	-----------	$3.26+/-0.59^{a}_{1}$	$2.73+/-0.91_{1}$	$1.27+/-0.32_{1}$	$2.91+/-0.73_{1}$
Daphnia 3 mm	-----------	-----------	-----------	-----------	-----------	-----------	$3.77+/-0.30^{a}_{1}$	$3.70+/-0.41_{1}$	$2.90+/-0.82_{1}$	$2.61+/-0.59_{1}$
Cyclopoid	$0.02+/-0.01^{d}$	0.01	0.02+/-0.01	0.01	0.02	0.02	0	0.02+/-0.01	0	-----------

Table 6.2 Mean (±se) filtering rates (ml animal^{-1} h^{-1}) of the dominant zooplankton taxa on the complete food and on different size fractions in three separate experiments. The results of pairwise comparisons within each experiment are shown using letter superscripts between taxa within the complete food and using number subscripts between the food types within each taxa.

Food Type	GROUP	POWER	DEVIATION	EXPONENT (se)
TOTAL	84.2 (3,10) ***	24.8 (1,2) *	9.4 (2,10) **	2.078 (0.418)
NANNO	42.9 (3,11) ***	56.2 (1,2) *	2.2 (2,11) ns	1.836 (0.245)
NET	11.9 (3,11) ***	35.0 (1,2) *	1.0 (2,11) ns	1.567 (0.265)
ULTRA	19.8 (3,9) ***	11.0 (1,2) ns	4.6 (2,9) *	1.711 (0.517)

Table 6.3 Power regression analysis between filtering rate (ml animal^{-1} h^{-1}) and body length (mm) for *Daphnia* grazing on different food types. Tabled are F ratios, degrees of freedom in parenthesis and the levels of significance. The exponents of the established relationships are shown.

TAXA	25.I.84	3.II.84	10.II.84
Boeckella	0.045+/-0.002^{ab}	0.026+/-0.003^{b}	0.017+/-0.005^{b}
Calamoecia	0.023+/-0.001^{c}	0.025+/-0.010^{b}	0.009+/-0.002^{b}
Ceriodaphnia	0.056+/-0.003^{a}	0.045+/-0.008^{ab}	0.025+/-0.002^{b}
Diaphanosoma	0.018+/-0.003^{c}	0.062+/-0.007^{a}	0.071+/-0.038^{a}
Daphnia 1 mm	0.028+/-0.009^{bc}	0.035+/-0.008^{ab}	0.021+/-0.003^{b}

Table 6.4 Mean ($\pm$se) filtering rates (ml (μg dry wt)$^{-1}$ h^{-1}) of the dominant zooplankton taxa on the complete food in each of the experiments. Results of pairwise comparisons between the taxa within the experiments are shown using superscripts.

TAXA	25.I.84	3.II.84	10.II.84
Boeckella	3.182+/-0.167^{a}	0.764+/-0.101^{b}	0.486+/-0.146^{b}
Calamoecia	0.413+/-0.018^{a}	0.089+/-0.018^{b}	0.064+/-0.014^{b}
Ceriodaphnia	0.310+/-0.018^{a}	0.104+/-0.018^{b}	0.057+/-0.005^{c}
Diaphanosoma	0.103+/-0.026^{a}	0.157+/-0.018^{a}	0.178+/-0.095^{a}
Daphnia 1 mm	0.426+/-0.194^{a}	0.193+/-0.043^{ab}	0.119+/-0.017^{b}

Table 6.5 Mean ($\pm$se) feeding rates ($10^6 \mu m^3$ animal^{-1} h^{-1}) of the dominant zooplankton taxa on the complete food in each of the experiments. Results of pairwise comparisons within taxa between experiments are shown using superscripts.

TAXA	25.I.84	3.II.84	10.II.84
Boeckella	0.116+/-0.006^{ab}	0.028+/-0.004^{def}	0.017+/-0.002^{ef}
Calamoecia	0.059+/-0.003^{cde}	0.013+/-0.002^{ef}	0.009+/-0.002^{f}
Ceriodaphnia	0.145+/-0.008^{a}	0.048+/-0.008^{cdef}	0.027+/-0.002^{def}
Diaphanosoma	0.044+/-0.011^{cdef}	0.067+/-0.008^{bcd}	0.075+/-0.041^{bc}
Daphnia 1 mm	0.082+/-0.037^{bc}	0.037+/-0.008^{cdef}	0.023+/-0.003^{def}

Table 6.6 Mean (±se) feeding rates ($10^6 \mu m^3$ (μg dry wt)$^{-1}$ h^{-1}) of the dominant zooplankton taxa on the complete food in each of the experiments. Results of pairwise comparisons across the experiments are shown using superscripts.

				TOTAL		NANNO		NET	
	KEY	D	B	I	C	I	C	I	C
25.I.84									
Boeckella	11	6	25	72	35	70	31	72	32
Calamoecia	21	50	58	9	42	7	31	9	37
Ceriodaphnia	31	33	12	7	19	11	31	11	28
Diaphanosoma	41	9	4	2	2	4	5	3	2
Daphnia 1 mm	51	2	2	10	2	9	2	5	1
3.II.84									
Boeckella	12	6	31	58	30	61	31	59	24
Calamoecia	22	38	47	7	23	14	42	25	61
Ceriodaphnia	32	48	18	8	38	5	21	5	12
Diaphanosoma	42	7	3	12	8	9	5	5	2
Daphnia 1 mm	52	1	1	15	1	11	1	7	1
10.II.84									
Boeckella	13	5	20	62	27	77	32	83	33
Calamoecia	23	50	62	8	40	6	27	9	40
Ceriodaphnia	33	41	16	7	27	9	36	7	26
Diaphanosoma	43	4	2	23	6	8	5	1	1
Daphnia 1 mm	53	-	-	-	-	-	-	-	-

Table 6.7 Relative (%) contribution of each of the dominant zooplankton taxa to the total community density [D], the total community biomass [B] and the total community filtration rate [C] in Mt Bold Reservoir during the experiments. The relative magnitude of the individual filtering rate [I] is also listed. The relative contributions are shown for the filtering rates on the complete food and on the two size fractions. Each taxa in each experiment is identified by a key number.

	1984	1985	1986	1987
Food Types X Replicates	5 X 5	5 X 6	5 X 5	5 X 5
Zooplankton (groups X animals)				
Boeckella	1-2 X 17-20	-----	-----	-----
Calamoecia	-----	3 X 50	3 X 25	2 X 25
Ceriodaphnia	-----	3 X 50	3 X 25	2 X 25
Daphnia 1 mm	1,2 X 5,10	-----	-----	-----
Daphnia 2 mm	3 X 5	-----	-----	-----

Table 6.8 Numbers of food tracer types, replicates, groups and animals for the four laboratory experiments examining the selection of tracers by zooplankton.

Tracer Type	Boeckella	Daphnia 1 mm	Daphnia 2 mm
Ankistrodesmus	0.506 ± 0.061^{bc}	0.555 ± 0.048^{b}	3.053 ± 0.170^{a}
Staurastrum	0.939 ± 0.128^{b}	0.291 ± 0.115^{c}	3.663 ± 0.484^{a}
Cyclotella	0.575 ± 0.127^{bc}	0.876 ± 0.117^{b}	3.606 ± 0.296^{a}
Microcystis	0.040 ± 0.007^{d}	0.262 ± 0.096^{c}	0.395 ± 0.057^{bc}
Selanastrum	0.644 ± 0.130^{b}	0.703 ± 0.138^{b}	3.629 ± 0.293^{a}

Table 6.9 Mean ($\pm$se) filtering rates (ml animal^{-1} h^{-1}) of *Boeckella* and two sizes of *Daphnia* using five different food tracers. The results of pairwise comparisons ($P < 0.05$) between animals and tracer types are shown using superscripts.

	1985		1986		1987	
Tracer Type	Calamoecia	Ceriodaphnia	Calamoecia	Ceriodaphnia	Calamoecia	Ceriodaphnia
Ankistrodesmus	0.109+/-0.019^{a}	0.078+/-0.008^{a}	0.452+/-0.045^{a}	0.511+/-0.037^{a}	0.340+/-0.018^{a}	0.205+/-0.029^{a}
Staurastrum	0.033+/-0.005^{b}	0.025+/-0.003^{b}	0.062+/-0.005^{d}	0.067+/-0.007^{d}	0.057+/-0.012^{b}	0.024+/-0.003^{c}
Cyclotella	0.100+/-0.006^{a}	0.089+/-0.008^{a}	0.253+/-0.018^{b}	0.432+/-0.013^{a}	0.256+/-0.015^{a}	0.252+/-0.030^{a}
Microcystis	0.031+/-0.003^{b}	0.014+/-0.001^{c}	0.045+/-0.003^{d}	0.114+/-0.013^{c}	0.035+/-0.005^{b}	0.011+/-0.001^{c}
Chlorella	0.171+/-0.027^{a}	0.099+/-0.011^{a}	-------------	-------------	-------------	-------------
Carteria	-------------	-------------	0.268+/-0.025^{b}	0.464+/-0.021^{a}	-------------	-------------
Chlamydomonas	-------------	-------------	-------------	-------------	0.233+/-0.022^{a}	0.129+/-0.013^{a}

Table 6.10 Mean (±se) filtering rates (ml animal^{-1} h^{-1}) of *Calamoecia* and *Ceriodaphnia*, in three separate experiments, using five different food tracers. The results of pairwise comparisons ($P < 0.05$) between animals and tracer types within each experiment are shown using superscripts.

EXPERIMENT	ZOOPLANKTON	TRACER	INTERACTION
1984	259.25 (2,125) ***	87.92 (4,125) ***	1.23 (8,125) ns
1985	3.98 (1,170) *	23.56 (4,170) ***	0.43 (4,170) ns
1986	21.77 (1,140) ***	62.31 (4,140) ***	3.32 (4,140) *
1987	13.67 (1,90) ***	24.39 (4,90) ***	0.97 (4,90) ns

Table 6.11 Results of factorial ANOVA on filtering rates within each experiment. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance.

	1985	1986	1987
Ankistrodesmus	27445+/-1913^{b}	470218+/-2788^{a}	43885+/-3355^{c}
Staurastrum	24828+/-2553^{b}	394331+/-5059^{b}	59808+/-1250^{b}
Cyclotella	21418+/-713^{b}	412762+/-1474^{b}	45420+/-1622^{c}
Microcystis	43470+/-1422^{a}	369656+/-7106^{c}	97432+/-607^{a}
Chlorella	24830+/-794^{b}	------	------
Carteria	------	367948+/-5260^{c}	------
Chlamydomonas	------	------	52868+/-425^{b}

Table 6.12 Mean (±se) particle concentrations (numbers ml^{-1}) of the food suspensions. Results of pairwise comparisons ($P < 0.05$) within experiments are shown using superscripts.

	1985	1986
Ankistrodesmus	6.24+/-0.95^{a}	2.37+/-0.08^{b}
Staurastrum	10.19+/-3.70^{a}	2.26+/-0.22^{b}
Cyclotella	7.69+/-1.53^{a}	2.08+/-0.04^{b}
Microcystis	7.20+/-2.30^{a}	2.21+/-0.18^{b}
Chlorella	6.59+/-0.53^{a}	-----
Carteria	-----	2.40+/-0.26^{b}

Table 6.13 Mean (±se) particle concentrations ($mm^3\,l^{-1}$) of the food suspensions. Results of pairwise comparisons ($P < 0.05$) across the experiments are shown using superscripts.

	1984			1985		1986		1987	
	Bt	Dc1	Dc2	Ca	Cq	Ca	Cq	Ca	Cq
Ankistrodesmus	2/3	2	1	1	1	1	1	1	1
Staurastrum	2	3	1	2	2	4	4	2	3
Cyclotella	2/3	2	1	1	1	2	1	1	1
Microcystis	4	3	2/3	2	3	4	3	2	3
Selenastrum	2	2	1	-	-	-	-	-	-
Chlorella	-	-	-	1	1	-	-	-	-
Carteria	-	-	-	-	-	2	1	-	-
Chlamydomonas	-	-	-	-	-	-	-	1	1

Table 6.14 Filtering rates of zooplankton taxa on algal tracers ranked within experiments. [Bt *Boeckella*, Dc1 *Daphnia* 1mm, Dc2 *Daphnia* 2mm, Ca *Calamoecia*, Cq *Ceriodaphnia*].

	21.III.84	4.IV.84
Water Types	Turbid Clear	Turbid Clear
Food Types	Staurastrum Chlorella	Staurastrum Ankistrodesmus
Replicates	2	5
Zooplankton (groups X animals)		
Boeckella	3 X 20	3 X 8-20
Daphnia 1 mm	2-3 X 3-5	3 X 5
Daphnia 2 mm	1-3 X 4-5	3 X 5
Daphnia 2.5 mm	1-3 X 2-5	3 X 5

Table 6.15 Water types, food tracer types, and numbers of replicates, groups and animals for the two field experiments which examined the influence of suspended sediment on zooplankton grazing.

	21.III.84				4.IV.84			
	Chlorella		Staurastrum		Ankistrodesmus		Staurastrum	
	Clear	Turbid	Clear	Turbid	Clear	Turbid	Clear	Turbid
Boeckella	2.23+/-0.12	2.47+/-0.16	2.73+/-0.09	2.54+/-0.21	1.42+/-0.05	0.70+/-0.07	2.27+/-0.22	1.36+/-0.17
Daphnia 1 mm	0.57+/-0.10	0.40+/-0.03	0.44+/-0.08	0.31+/-0.04	0.77+/-0.05	0.39+/-0.04	0.51+/-0.07	0.09+/-0.01
Daphnia 2 mm	1.61+/-0.21	0.97+/-0.11	1.57+/-0.27	1.03+/-0.11	2.35+/-0.13	1.38+/-0.10	2.18+/-0.15	1.27+/-0.12
Daphnia 2.5 mm	2.49+/-0.17	2.38+/-0.13	1.93+/-0.45	2.27+/-0.24	3.19+/-0.22	2.05+/-0.16	2.85+/-0.18	2.11+/-0.18

Table 6.16 Mean (±se) filtering rates (ml animal^{-1} h^{-1}) of *Boeckella* and three sizes of *Daphnia* in clear and turbid water using different food tracers in two separate experiments.

(a)	Chlorella (CHL)	Staurastrum (STR)	Clear	Turbid
	Turbid vs. Clear	Turbid vs. Clear	CHL vs. STR	CHL vs. STR
Boeckella	ns	ns	**	ns
Daphnia 1 mm	ns	ns	ns	ns
Daphnia 2 mm	*	ns	ns	ns
Daphnia 2.5 mm	ns	ns	ns	ns

(b)	Ankistrodesmus (ANK)	Staurastrum (STR)	Clear	Turbid
	Turbid vs. Clear	Turbid vs. Clear	ANK vs. STR	ANK vs. STR
Boeckella	***	**	***	**
Daphnia 1 mm	***	***	**	***
Daphnia 2 mm	***	***	ns	ns
Daphnia 2.5 mm	***	**	ns	ns

Table 6.17 Results of specific ANOVA comparisons in the (a) 21.III.84 and (b) 4.IV.84 experiments.

(a)	GROUP	LINEAR	DEVIATION	SLOPE (se)
Ankistrodesmus				
Clear	65.7 (2,42) ***	3403.6 (1,1) *	0.04 (1,42) ns	1.607 (0.028)
Turbid	57.0 (2,42) ***	152.3 (1,1) ns	0.74 (1,42) ns	1.089 (0.088)
Staurastrum				
Clear	72.0 (2,42) ***	336.9 (1,1) *	0.43 (1,42) ns	1.577 (0.086)
Turbid	66.9 (2,42) ***	117.4 (1,1) ns	1.13 (1,42) ns	1.324 (0.122)

(b)	GROUP	POWER	DEVIATION	EXPONENT (se)
Ankistrodesmus				
Clear	117.1 (2,42) ***	2358.0 (1,1) *	0.10 (1,42) ns	1.522 (0.031)
Turbid	76.6 (2,42) ***	662.5 (1,1) *	0.23 (1,42) ns	1.365 (0.053)
Staurastrum				
Clear	109.6 (2,42) ***	155.5 (1,1) (ns)	1.40 (1,42) ns	1.710 (0.137)
Turbid	127.2 (2,42) ***	909.3 (1,1) *	0.28 (1,42) ns	1.821 (0.060)

Table 6.18 Linear (a) and power (b) regression analysis between filtering rate (ml animal^{-1} h^{-1}) and *Daphnia* body length (mm) for each combination of tracer and water type. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance. The slopes or exponents of the established relationships are shown.

TAXA	Ankistrodesmus		Staurastrum	
	I	B	I	B
Boeckella	0.020	0.0008	0.027	0.0011
Daphnia 1 mm	0.011	0.0022	0.012	0.0024
Daphnia 2 mm	0.028	0.0010	0.027	0.0009
Daphnia 2.5 mm	0.033	0.0007	0.022	0.0004

Table 6.19 Rate of change in filtering rate of *Boeckella* and *Daphnia* (1, 2 and 2.5 mm) with increased seston concentration; [I] on an individual basis (ml animal^{-1} h^{-1} per mg l^{-1}) and [B] on a biomass basis (ml (μg dry wt)$^{-1}$ h^{-1} per mg l^{-1}) using *Ankistrodesmus* and *Staurastrum* as food tracers.

	4.IV.86	10.IV.86	16.IV.86	24.IV.86
Medium	Mt Bold water	Clay suspension	Clay suspension	Clay with Ankistrodesmus suspension
Replicates	3	3	3	1,3
Zooplankton (groups X animals)				
Boeckella	3 X 20	3 X 20	3 X 20	2 X 20
Ceriodaphnia	3 X 50	3 X 25	3 X 25	2 X 25
Calamoecia	-----	-----	-----	2 X 25

Table 6.20 Feeding media and numbers of replicates, groups and animals for the five laboratory experiments which examined the influence of suspended sediment on zooplankton grazing.

Ankistrodesmus	Boeckella		Calamoecia		Ceriodaphnia	
	Filtering	Feeding	Filtering	Feeding	Filtering	Feeding
1388+/-104	0.578+/-0.078^{b}	815+/-142^{d}	0.093+/-0.014^{a}	129+/-21^{d}	0.185+/-0.018^{a}	253+/-16^{d}
4838+/-332	0.825+/-0.051^{a}	3982+/-281^{c}	0.107+/-0.010^{a}	517+/-59^{c}	0.201+/-0.009^{a}	979+/-75^{c}
11540+/-478	0.617+/-0.055^{b}	7153+/-704^{b}	0.094+/-0.009^{a}	1081+/-96^{b}	0.167+/-0.016^{a}	1947+/-220^{b}
54593+/-528	0.189+/-0.021^{c}	10300+/-1157^{ab}	0.027+/-0.003^{b}	1473+/-153^{ab}	0.050+/-0.003^{b}	2729+/-190^{a}
108667+/-2739	0.105+/-0.012^{c}	11367+/-1182^{a}	0.017+/-0.002^{b}	1808+/-182^{a}	0.033+/-0.002^{c}	3589+/-181^{a}

Table 6.21 Mean (±se) filtering (ml animal^{-1} h^{-1}) and feeding (cell animal^{-1} h^{-1}) rates of *Boeckella*, *Calamoecia* and *Ceriodaphnia* in five concentrations (cells ml^{-1}) of *Ankistrodesmus* food. The results of pairwise comparisons ($P < 0.05$) between the food concentrations for each animal are shown using superscripts.

(a)

TAXA	RANGE	(n)	GROUP	LINEAR	DEVIATION	SLOPE (se)
Boeckella	0-40	4	3.2 (3,32) *	40.7 (1,2) *	0.2 (2,32) ns	-0.0037 (0.0006)
	80-160	3	7.1 (2,24) **	9.7 (1,1) ns	1.3 (1,24) ns	-0.0016 (0.0005)
Ceriodaphnia	0-40	4	25.8 (3,23) ***	131.0 (1,2) **	0.6 (2,23) ns	-0.0006 (0.0001)
	80-160	3	17.2 (2,24) ***	1.6 (1,1) ns	13.1 (1,24) **	-0.0001 (0.0001)

(b)

TAXA	RANGE	(n)	GROUP	POWER	DEVIATION	EXPONENT (se)
Boeckella	0-40	4	3.1 (3,32) *	4.3 (1,2) ns	1.5 (1,32) ns	-0.022 (0.011)
	80-160	3	7.1 (2,24) **	5.3 (1,1) ns	2.2 (1,24) ns	-0.121 (0.052)
Ceriodaphnia	0-40	4	26.2 (3,23) ***	23.2 (1,2) *	3.1 (1,23) ns	-0.005 (0.001)
	80-160	3	17.2 (2,24) ***	2.4 (1,1) ns	10.0 (1,24) **	-0.015 (0.010)

Table 6.22 Linear (a) and power (b) regression analysis between filtering rate (ml animal^{-1} h^{-1}) and clay concentration (mg l^{-1}) across two ranges of clay concentration for *Boeckella* and *Ceriodaphnia*. Tabled are the F ratios, degrees of freedom in parenthesis and the levels of significance. The slopes or exponents of the established relationships are shown.

Mixture	Ankistrodesmus Cells	Clay Particles	Total Volume	Boeckella	Ceriodaphnia	Calamoecia
1	10^3 ($2.4X10^5$)	$5.7X10^5$ ($2.4X10^6$)	($2.64X10^6$)	0.214+/-0.031^a	0.124+/-0.013^a	0.013+/-0.002^a
2	10^4 ($2.4X10^6$)	$5.7X10^4$ ($2.4X10^5$)	($2.64X10^6$)	0.044+/-0.005^b	0.073+/-0.004^b	0.005+/-0.001^b
3	10^4 ($2.4X10^6$)	$5.7X10^5$ ($2.4X10^6$)	($4.8X10^6$)	0.037+/-0.007^b	0.036+/-0.003^c	0.004+/-0.002^b
4	10^4 ($2.4X10^6$)	$5.7X10^6$ ($2.4X10^7$)	($2.64X10^7$)	0.011+/-0.001^c	0.007+/-0.001^d	0.001+/-0.0001^b
5	10^5 ($2.4X10^7$)	$5.7X10^5$ ($2.4X10^6$)	($2.64X10^7$)	0.025+/-0.002^b	0.029+/-0.002^c	0.003+/-0.001^b

Table 6.23 Mean ($\pm$se) filtering rates (ml animal^{-1} h^{-1}) of *Boeckella*, *Ceriodaphnia* and *Calamoecia* in five different mixtures of *Ankistrodesmus* and clay. The composition of each mixture is given in terms of number (cells or particles ml^{-1}) with volume (μm^3 ml^{-1}) in parenthesis. The results of pairwise comparisons ($P < 0.05$) across the mixtures for each animal are shown using superscripts.

	SMALL VOLUME CHANGE		LARGE VOLUME CHANGE	
TAXA	CLAY	ANK	CLAY	ANK
Boeckella	0.0032	0.0819	0.0012	0.0006
Ceriodaphnia	0.0171	0.0407	0.0013	0.0003
Calamoecia	0.0005	0.0042	0.0001	0.00005

Table 6.24 Rate of change in filtering rate (ml animal^{-1} h^{-1} per $10^6 \mu m^3$ ml^{-1}) of *Boeckella, Ceriodaphnia* and *Calamoecia* with small (2.64×10^6 to 4.8×10^6 μm^3 ml^{-1}) or large (4.8×10^6 to 26.4×10^6 μm^3 ml^{-1}) changes in particle concentration either as clay or *Ankistrodesmus* [ANK].

TAXA	LOW			HIGH		
	Ankistrodesmus 10^4 cells ml^{-1}		Clay 17 mg l^{-1}	Ankistrodesmus 10^5 cells ml^{-1}		Clay 203 mg l^{-1}
Boeckella	0.617+/-0.055	**	0.340+/-0.033	0.105+/-0.012	**	0.183+/-0.021
Calamoecia	0.094+/-0.009	(ns)	0.068+/-0.008	0.017+/-0.002	*	0.012+/-0.001
Ceriodaphnia	0.167+/-0.016	***	0.030+/-0.005	0.033+/-0.002	***	0.011+/-0.001

Table 6.25 Mean (±se) filtering rates (ml animal^{-1} h^{-1}) of *Boeckella*, *Calamoecia* and *Ceriodaphnia* in high and low concentrations of both *Ankistrodesmus* and clay which had the same total concentration by volume. The results of ANOVA comparisons between the paired food suspensions are shown.

TAXA	TURBIDITY RANGE (units)	RELATIONSHIP (units)	Tc	SOURCE
Boeckella triarticulata	0-40 (mg/l)	FR (ml/animal/h) = 0.615 - 0.0037 T (mg/l)		this study
	80-160 (mg/l)	FR (ml/animal/h) = 0.693 - 0.0016 T (mg/l)		this study
Ceriodaphnia quadrangula	0-40 (mg/l)	FR (ml/animal/h) = 0.035 - 0.0006 T (mg/l)		this study
	80-160 (mg/l)	FR (ml/animal/h) = 0.032 - 0.0001 T (mg/l)		this study
Daphnia pulex	0-60 (NTU)	FR (ml/animal/h) = $3.069\ T^{-0.60}$ (NTU)		McCabe and O'Brien (1983)
Daphnia galeata	8-60 (mg/l)	FR (ml/animal/d) = $280.34\ T^{-0.788}$ (mg/l)		G-Toth et al. (1986)
Moina brachiata	0-225 (NTU)	CR (%body wt/d) = 137 - 0.83 T (NTU)	93	Hart (1988)
Metadiaptomus meridianus	0-225 (NTU)	CR (%body wt/d) = 65 - 0.27 T (NTU)	76	Hart (1988)
Daphnia barbata	0-225 (NTU)	CR (%body wt/d) = 45 - 0.16 T (NTU)	-10	Hart (1988)
Daphnia gibba	0-225 (NTU)	CR (%body wt/d) = 43 - 0.13 T (NTU)	43	Hart (1988)
Daphnia longispina	0-125 (NTU)	CR (%body wt/d) = 39 - 0.05 T (NTU)	-254	Hart (1988)

Table 6.26 Relationships between zooplankton filtering rates [FR] or consumption rates [CR] and turbidity [T] in this study and in the literature. See text for details about the critical turbidity [Tc] (NTU).

TAXA	RANGE (mg/l)	RELATIONSHIP	Tc (NTU)
Boeckella triarticulata	0-40	CR = 45.9 - 0.55 T	45
	80-160	CR = 27.2 - 0.12 T	49
Ceriodaphnia quadrangula	0-40	CR = 19.6 - 0.62 T	-18
	80-160	CR = 6.8 - 0.05 T	-438

Table 6.27 Relationship between consumption rate [CR] (% body wt d^{-1}) and nephelometric turbidity [T] (NTU) for *Boeckella* and *Ceriodaphnia* across the ranges of clay concentration. See text for details about the critical turbidity Tc.

APPENDICES

Appendix 3.1 Seasonal variation in $K_d ave$ (se) (ln m^{-1}), R_a, b'_b (ln m^{-1}), a (m^{-1}), b (m^{-1}) and $\overline{I}$ (MJ m^{-2} d^{-1}) in Mt Bold Reservoir during the study period.

Date	Day	$K_d ave$	(se)	R_a	b'_b	a	b	$\overline{I}$
7.IX.81	0	2.886	(0.037)	0.076	0.439	1.616	13.414	12.1
14.IX.81	7	2.715	(0.046)	0.068	0.369	1.548	11.607	15.3
18.IX.81	11	3.558	(0.051)	0.070	0.498	2.028	15.616	14.2
21.IX.81	14	2.544	(0.031)	0.059	0.300	1.526	9.616	16.6
25.IX.81	18	2.993	(0.104)	0.050	0.299	1.856	10.206	17.0
28.IX.81	21	2.687	(0.057)	0.043	0.231	1.747	8.733	13.2
2.X.81	25	2.458	(0.034)	0.047	0.231	1.549	8.052	12.9
5.X.81	28	2.479	(0.033)	0.044	0.218	1.611	8.057	14.5
8.X.81	31	2.438	(0.046)	0.047	0.229	1.536	7.987	17.4
16.X.81	39	2.373	(0.035)	0.054	0.256	1.448	8.685	22.7
19.X.81	42	2.385	(0.048)	0.038	0.181	1.598	7.191	24.0
23.X.81	46	2.372	(0.049)	0.030	0.142	1.660	5.811	19.5
26.X.81	49	2.183	(0.027)	0.038	0.166	1.463	6.582	20.1
30.X.81	53	2.217	(0.029)	0.044	0.195	1.441	7.205	22.9
2.XI.81	56	-----	-----	-----	-----	-----	-----	24.1
6.XI.81	60	2.381	(0.024)	0.024	0.114	1.738	4.867	24.9
9.XI.81	63	-----	-----	-----	-----	-----	-----	22.4
13.XI.81	67	2.254	(0.027)	0.034	0.153	1.533	6.131	19.0
16.XI.81	70	2.199	(0.033)	0.034	0.149	1.495	5.981	17.5
20.XI.81	74	1.936	(0.038)	0.032	0.124	1.336	4.943	22.3
23.XI.81	77	2.127	(0.033)	0.044	0.187	1.383	6.913	26.7
27.XI.81	81	2.478	(0.050)	0.036	0.178	1.685	7.077	26.4
30.XI.81	84	2.019	(0.044)	0.028	0.113	1.433	4.731	26.4
4.XII.81	88	2.101	(0.035)	0.031	0.130	1.450	5.074	29.6
7.XII.81	91	1.816	(0.034)	0.032	0.116	1.253	4.636	27.2
11.XII.81	95	2.414	(0.030)	-----	-----	-----	-----	22.8
14.XII.81	98	2.124	(0.035)	0.047	0.200	1.338	6.958	19.3
18.XII.81	102	1.921	(0.035)	0.050	0.192	1.191	6.551	23.8
21.XII.81	105	1.913	(0.038)	0.038	0.145	1.282	5.768	29.8
30.XII.81	114	2.497	(0.083)	0.048	0.240	1.598	8.470	29.1
8.I.82	123	1.779	(0.057)	0.058	0.206	1.067	6.831	23.1
11.I.82	126	1.934	(0.027)	0.060	0.232	1.160	7.543	24.6
15.I.82	130	2.159	(0.022)	0.054	0.233	1.317	7.902	28.3
18.I.82	133	2.022	(0.026)	0.056	0.227	1.233	7.647	30.0
22.I.82	137	2.148	(0.035)	0.063	0.271	1.267	8.618	29.7
25.I.82	140	1.831	(0.038)	0.084	0.308	0.989	8.899	26.3
29.I.82	144	1.937	(0.020)	0.087	0.337	1.027	9.547	25.2
2.II.82	148	2.073	(0.025)	0.074	0.307	1.161	9.055	28.0
5.II.82	151	2.161	(0.037)	0.094	0.406	1.124	11.012	28.4
8.II.82	154	1.925	(0.042)	0.084	0.323	1.039	9.356	28.8
12.II.82	158	2.038	(0.042)	0.088	0.359	1.080	10.153	27.8
15.II.82	161	2.243	(0.034)	0.088	0.395	1.189	11.175	25.2
19.II.82	165	2.035	(0.029)	0.068	0.277	1.160	8.584	19.9
22.II.82	168	2.405	(0.041)	0.088	0.423	1.275	11.982	19.1
26.II.82	172	2.481	(0.117)	0.109	0.541	1.240	14.266	21.2
1.III.82	175	2.539	(0.054)	0.070	0.356	1.447	10.854	23.9
9.III.82	183	2.759	(0.045)	0.072	0.397	1.573	11.952	21.0
16.III.82	190	3.292	(0.050)	0.092	0.606	1.712	16.434	16.0
23.III.82	197	2.847	(0.126)	0.141	0.803	1.281	19.473	18.9
30.III.82	204	2.123	(0.050)	0.096	0.408	1.083	10.827	16.4
6.IV.82	211	1.987	(0.026)	0.065	0.258	1.152	8.067	13.8
14.IV.82	219	2.095	(0.054)	0.058	0.243	1.236	7.911	16.3
21.IV.82	226	1.813	(0.043)	0.074	0.268	1.015	7.919	10.5
29.IV.82	234	1.767	(0.075)	0.093	0.329	0.919	8.270	7.7
5.V.82	240	-----	-----	-----	-----	-----	-----	7.2
13.V.82	248	1.802	(0.045)	0.064	0.231	1.045	7.316	8.8
25.V.82	260	2.099	(0.132)	0.083	0.348	1.112	9.790	6.5
1.VI.82	267	1.499	(0.019)	0.062	0.186	0.869	5.912	5.4
9.VI.82	275	1.582	(0.023)	0.092	0.291	0.807	7.261	9.6
16.VI.82	282	1.434	(0.031)	0.058	0.166	0.846	5.415	6.4
23.VI.82	289	1.667	(0.015)	0.072	0.240	0.934	7.095	6.0

Appendix 3.1 continued

Date	Day	$K_d ave$	(se)	R_a	b'_b	a	b	$\overline{I}$
30.VI.82	296	1.652	(0.025)	0.090	0.297	0.859	8.161	7.1
7.VII.82	303	1.900	(0.113)	0.096	0.365	0.969	9.690	7.7
14.VII.82	310	1.538	(0.039)	0.081	0.249	0.815	7.010	7.3
21.VII.82	317	1.638	(0.035)	0.072	0.236	0.901	6.847	10.4
28.VII.82	324	2.482	(0.022)	0.086	0.427	1.291	10.970	8.9
4.VIII.82	331	2.071	(0.019)	0.096	0.398	1.056	10.562	9.1
12.VIII.82	339	1.950	(0.020)	0.077	0.300	1.053	8.424	12.0
18.VIII.82	345	2.532	(0.032)	0.124	0.628	1.190	15.471	11.8
25.VIII.82	352	1.646	(0.022)	0.090	0.296	0.856	8.131	13.6
1.IX.82	359	1.507	(0.014)	0.105	0.317	0.738	7.975	14.7
8.IX.82	366	1.504	(0.037)	0.094	0.283	0.782	7.039	13.3
15.IX.82	373	1.173	(0.006)	0.117	0.275	0.563	6.756	13.3
22.IX.82	380	1.023	(0.003)	0.119	0.243	0.471	5.647	15.8
29.IX.82	387	0.904	(0.008)	0.119	0.215	0.416	4.990	15.3
6.X.82	394	0.728	(0.007)	0.093	0.135	0.379	3.293	19.1
13.X.82	401	0.509	(0.012)	-----	-----	-----	-----	17.3
20.X.82	408	0.599	(0.011)	0.094	0.113	0.305	2.994	20.6
27.X.82	415	0.511	(0.004)	0.100	0.102	0.255	2.683	17.4
3.XI.82	422	0.498	(0.002)	0.100	0.100	0.249	2.615	24.7
10.XI.82	429	0.532	(0.013)	0.081	0.086	0.282	2.425	24.2
17.XI.82	436	0.482	(0.010)	0.050	0.048	0.304	1.670	22.5
24.XI.82	443	0.376	(0.006)	0.062	0.047	0.222	1.509	27.9
1.XII.82	450	0.410	(0.010)	0.056	0.046	0.258	1.472	24.3
3.XII.82	452	-----	-----	-----	-----	-----	-----	25.0
8.XII.82	457	0.438	(0.014)	0.040	0.035	0.289	1.330	27.5
10.XII.82	459	-----	-----	-----	-----	-----	-----	25.1
13.XII.82	462	0.447	(0.007)	0.059	0.053	0.268	1.690	26.1
17.XII.82	466	-----	-----	-----	-----	-----	-----	29.4
20.XII.82	469	0.436	(0.019)	0.054	0.047	0.270	1.622	29.9
24.XII.82	473	-----	-----	-----	-----	-----	-----	30.4
30.XII.82	479	0.363	(0.021)	0.100	0.073	0.185	1.944	20.0
4.I.83	484	0.444	(0.009)	0.030	0.027	0.306	1.072	25.5
7.I.83	487	-----	-----	-----	-----	-----	-----	29.9
11.I.83	491	0.506	(0.009)	-----	-----	-----	-----	28.2
14.I.83	494	-----	-----	-----	-----	-----	-----	23.0
17.I.83	497	0.483	(0.010)	0.053	0.051	0.299	1.707	21.7
21.I.83	501	-----	-----	-----	-----	-----	-----	27.6
25.I.83	505	0.336	(0.006)	0.036	0.024	0.228	0.914	29.7
28.I.83	508	-----	-----	-----	-----	-----	-----	29.0
1.II.83	512	0.345	(0.018)	0.043	0.030	0.224	1.099	28.9
4.II.83	515	-----	-----	-----	-----	-----	-----	26.4
8.II.83	519	0.389	(0.017)	-----	-----	-----	-----	25.3
11.II.83	522	-----	-----	-----	-----	-----	-----	25.2
18.II.83	529	0.411	(0.007)	-----	-----	-----	-----	24.3
22.II.83	533	0.388	(0.008)	0.037	0.029	0.264	1.082	24.4
2.III.83	541	0.418	(0.008)	0.036	0.030	0.284	1.137	21.0
8.III.83	547	0.453	(0.024)	0.038	0.034	0.304	1.275	15.6
23.III.83	562	0.635	(0.017)	-----	-----	-----	-----	16.5
30.III.83	569	0.669	(0.018)	-----	-----	-----	-----	16.9
31.III.83	570	-----	-----	-----	-----	-----	-----	18.4
6.IV.83	576	0.594	(0.016)	-----	-----	-----	-----	10.5
13.IV.83	583	0.545	(0.013)	-----	-----	-----	-----	9.3
20.IV.83	590	0.613	(0.011)	0.072	0.088	0.343	2.643	14.4
27.IV.83	597	0.639	(0.011)	0.074	0.095	0.345	2.691	11.6
4.V.83	604	0.534	(0.032)	0.058	0.062	0.315	2.016	11.6
11.V.83	611	0.653	(0.016)	0.073	0.095	0.359	2.765	11.1
19.V.83	619	1.103	(0.019)	0.093	0.205	0.563	5.513	9.5
1.VI.83	632	0.974	(0.078)	0.092	0.179	0.506	4.862	7.3
8.VI.83	639	0.834	(0.014)	0.080	0.133	0.442	3.757	9.7
15.VI.83	646	0.966	(0.023)	0.087	0.168	0.502	4.621	7.6
22.VI.83	653	0.963	(0.015)	0.084	0.162	0.510	4.594	8.7
6.VII.83	667	0.824	(0.018)	0.060	0.099	0.478	3.106	6.7
20.VII.83	681	0.818	(0.017)	0.062	0.101	0.474	3.274	7.7
9.VIII.83	701	1.935	(0.189)	0.082	0.317	1.026	8.820	10.6
24.VIII.83	716	1.787	(0.033)	0.042	0.150	1.108	5.097	11.4
14.IX.83	737	2.667	(0.133)	0.048	0.256	1.627	8.460	11.9

Appendix 3.2 Areal abundance estimates (10^3 m^{-2}) of zooplankton taxa in Mt Bold Reservoir during the 1981/1983 study period. See Figure 3.40 for taxa codes.

DATE	DAY	Bt	Ca	Cy	cc	cn	Dc	Cq	Cc	Du	Bm	Hx	Sy	Kt	Py	Ch	Ap
14.IX.81	7	12	3	6	41	170	73	336	0	4	1	0	1	1	0	0	0
18.IX.81	10	14	11	6	42	207	85	283	0	3	0	1	0	1	0	0	0
21.IX.81	14	35	5	27	122	396	141	290	0	17	7	1	0	0	0	0	0
25.IX.81	18	16	13	5	103	214	63	171	0	1	0	0	0	2	0	0	0
28.IX.81	21	46	57	34	146	685	28	369	0	7	1	1	0	0	0	0	0
2.X.81	25	46	108	21	299	875	26	417	0	17	0	0	0	0	0	0	0
5.X.81	28	53	101	19	247	484	14	372	0	10	0	0	0	0	0	0	0
8.X.81	31	65	249	9	205	227	19	279	0	13	1	0	0	0	0	0	0
16.X.81	39	181	224	19	419	855	38	581	0	72	0	25	0	2	0	0	0
19.X.81	42	78	669	28	277	1075	22	501	0	23	0	31	0	0	0	0	0
23.X.81	46	73	216	51	633	1837	28	800	0	38	0	140	0	0	0	0	0
26.X.81	49	44	202	78	427	810	9	592	0	11	1	38	0	1	0	0	0
30.X.81	53	25	153	62	527	749	8	623	0	40	0	72	0	0	0	0	0
2.XI.81	56	24	601	301	374	1366	18	767	0	8	0	153	7092	68	0	0	0
6.XI.81	60	204	21	221	794	1386	13	1473	0	17	1	202	0	5	0	0	0
9.XI.81	63	69	292	148	624	1812	15	1568	0	16	0	332	2	23	30	0	0
13.XI.81	67	50	305	81	931	1675	5	774	0	16	1	342	1	7	0	0	0
16.XI.81	70	83	358	76	1046	1580	12	792	0	13	0	284	1	10	0	0	0
20.XI.81	74	40	268	25	1713	2451	0	93	0	2	0	77	0	8	0	0	0
23.XI.81	77	25	317	31	2001	1192	0	82	0	0	0	196	1	2	0	0	0
27.XI.81	81	21	80	363	251	2714	11	63	0	9	17	241	96716	1831	3104	0	113
30.XI.81	84	185	701	431	964	2167	3	57	0	5	40	389	7	616	344	0	39
4.XII.81	88	243	586	278	279	3654	5	52	0	0	17	571	0	8100	1948	0	269
7.XII.81	91	856	1410	209	547	2219	46	153	0	44	22	109	0	235	94	0	0
11.XII.81	95	869	1950	253	759	2321	25	205	0	58	41	81	0	22	0	0	0
14.XII.81	98	1306	2426	355	1551	4857	61	272	0	97	373	312	0	1283	0	0	0
18.XII.81	102	525	1177	122	712	1447	10	141	0	26	494	61	0	300	0	0	0
21.XII.81	105	407	1717	169	1240	1531	17	196	0	36	440	74	0	165	0	0	0
30.XII.81	114	244	1139	53	537	1269	4	226	0	36	641	253	0	11107	0	0	0
8.I.82	123	458	1477	89	371	2323	77	1774	0	325	295	288	0	12	0	0	0
11.I.82	126	543	1371	56	556	1810	210	1539	0	209	455	220	0	29	0	21	0
15.I.82	130	119	647	44	306	2434	39	225	0	19	249	363	0	26	0	413	0
18.I.82	133	341	986	57	387	2708	30	235	0	140	381	257	0	32	0	823	0

Appendix 3.2 continued

DATE	DAY	Bt	Ca	Cy	cc	cn	Dc	Cq	Cc	Du	Bm	Hx	Sy	Kt	Py	Ch	Ap
22.I.82	137	188	1229	57	226	2345	35	253	1	20	495	465	4	41	0	1982	0
25.I.82	140	201	447	32	161	1853	70	357	0	14	443	118	5	8	0	1581	0
29.I.82	144	349	424	63	116	2003	98	284	0	111	389	130	8	9	0	0	0
2.II.82	148	259	277	82	72	2956	105	201	0	45	59	204	11	7	0	50	0
8.II.82	154	271	162	308	123	2659	526	225	0	134	108	245	0	6	0	9	0
12.II.82	158	190	97	303	427	2330	260	164	3	94	204	252	0	6	0	2	0
15.II.82	161	232	107	380	469	2184	522	191	1	47	128	211	2	7	0	0	0
19.II.82	165	543	49	348	589	1271	455	178	0	64	35	9	0	1	0	0	0
22.II.82	168	142	90	409	693	1614	109	185	2	61	52	36	0	3	0	0	0
26.II.82	172	114	152	626	613	930	19	278	1	35	166	50	0	5	0	0	0
1.III.82	175	647	91	598	390	1171	6	191	1	27	114	52	0	1	0	0	0
9.III.82	183	88	121	281	179	1210	11	172	2	62	26	82	0	1	0	0	0
16.III.82	190	52	71	271	71	536	11	262	4	96	37	88	1	1	0	0	0
23.III.82	197	1	38	400	24	380	4	171	48	98	17	169	0	0	0	0	0
30.III.82	204	0	4	647	3	301	1	331	50	94	18	172	0	1	0	0	0
6.IV.82	211	0	5	449	256	256	1	289	102	56	7	275	2	0	0	0	0
14.IV.82	219	5	56	468	63	622	7	440	174	189	396	187	1	1	7	0	0
21.IV.82	226	1	19	806	14	954	5	126	162	113	57	187	1	37	5	0	0
29.IV.82	234	5	20	650	18	1590	1	44	99	32	29	465	0	17	68	0	0
13.V.82	248	3	19	730	9	1106	0	24	54	42	3	64	2	1	6	0	0
25.V.82	260	3	14	681	20	991	0	8	15	2	0	12	0	1	15	0	0
1.VI.82	267	1	37	357	57	658	1	6	27	1	1	98	0	10	18	0	0
9.VI.82	275	8	42	462	26	927	0	4	21	1	0	72	0	9	53	0	0
16.VI.82	282	18	56	348	28	732	1	15	26	1	4	112	0	1	15	0	0
23.VI.82	289	6	69	120	48	435	0	11	37	1	1	55	1	0	25	0	0
30.VI.82	296	15	86	62	31	459	1	9	13	2	0	63	0	1	1	0	0
7.VII.82	303	20	107	34	53	483	0	16	6	1	0	23	1	0	1	0	0
14.VII.82	310	25	121	24	48	370	1	38	13	1	1	26	0	0	0	0	0
21.VII.82	317	40	221	18	50	337	3	71	10	1	0	28	0	0	0	0	0
28.VII.82	324	14	288	21	20	238	1	63	10	3	0	27	0	0	0	0	0
4.VIII.82	331	35	326	40	11	351	8	74	11	1	0	9	3	0	0	0	0
12.VIII.82	339	126	934	47	26	432	4	273	1	9	0	6	1	0	0	0	0
18.VIII.82	345	66	461	44	19	423	7	248	0	9	0	0	1	0	0	0	0
25.VIII.82	352	25	201	15	5	232	4	262	1	16	0	0	0	0	0	0	0
1.IX.82	359	33	298	18	40	330	9	361	0	36	0	0	1	0	0	0	0
8.IX.82	366	45	264	23	97	484	13	532	0	18	0	0	0	0	0	0	0
15.IX.82	373	23	172	26	151	492	55	351	0	64	0	1	0	0	0	0	0
22.IX.82	380	41	832	58	971	1437	55	648	0	139	0	3	0	0	0	0	0
29.IX.82	387	75	808	24	429	1050	33	539	0	46	0	1	0	0	0	0	0
6.X.82	394	176	2551	50	423	1289	77	753	0	124	0	0	0	0	0	0	0

Appendix 3.2 continued

DATE	DAY	Bt	Ca	Cy	cc	cn	Dc	Cq	Cc	Du	Bm	Hx	Sy	Kt	Py	Ch	Ap
13.X.82	401	82	1393	37	268	736	180	462	0	30	0	5	0	0	0	0	0
20.X.82	408	50	535	30	166	559	76	286	0	9	0	0	0	0	0	0	0
27.X.82	415	170	938	15	147	624	90	216	0	26	3	0	0	0	0	0	0
3.XI.82	422	95	1579	3	402	1595	52	290	0	29	0	0	0	0	0	0	0
10.XI.82	429	92	1173	28	320	2983	42	299	0	39	0	0	0	0	0	0	0
17.XI.82	436	159	1604	24	284	2359	117	573	0	59	0	15	2	0	0	0	0
24.XI.82	443	180	819	45	251	1580	184	493	0	20	0	10	11	0	0	0	0
1.XII.82	450	144	747	23	205	841	108	280	0	5	0	81	17	1	0	0	0
8.XII.82	457	122	689	17	198	1007	112	67	0	22	0	227	9	1	0	0	0
13.XII.82	462	55	796	13	202	958	122	21	0	12	0	178	9	0	0	0	0
20.XII.82	469	11	520	12	92	1049	127	5	0	10	0	1204	0	0	0	0	0
30.XII.82	479	12	355	121	404	2033	399	4	0	0	0	643	96	0	0	0	0
4.I.83	484	3	226	84	468	1068	53	3	0	12	0	355	0	0	0	0	0
11.I.83	491	13	733	58	350	1679	72	5	0	5	0	761	0	0	0	0	0
17.I.83	497	8	300	35	90	1054	37	4	0	0	0	608	0	0	0	0	0
25.I.83	505	101	306	62	501	1214	943	8	0	2	0	468	14	0	0	0	0
1.II.83	512	35	355	49	540	700	425	23	0	0	0	32	14	0	0	0	0
8.II.83	519	11	260	25	144	383	100	13	0	0	0	12	0	0	0	0	0
18.II.83	529	3	563	17	152	703	74	40	0	0	0	365	0	0	0	0	0
22.II.83	533	5	365	33	30	752	353	66	0	0	0	334	0	0	0	0	0
2.III.83	541	3	182	62	287	1267	141	97	0	0	0	348	0	0	0	0	0
8.III.83	547	0	244	103	333	616	27	92	0	1	0	88	0	0	0	0	6
23.III.83	562	25	289	267	261	1900	18	30	0	6	0	444	2	0	0	0	3738
30.III.83	569	23	229	293	68	3386	5	10	0	0	0	147	4	0	0	0	28
6.IV.83	576	19	342	246	299	3259	5	30	0	2	0	83	0	0	0	0	0
13.IV.83	583	21	215	249	63	1859	8	16	0	0	0	44	1	0	0	0	0
20.IV.83	590	4	72	218	23	932	0	9	0	0	0	24	0	0	0	0	0
27.IV.83	597	15	165	256	53	1257	6	8	0	2	1	27	8	0	0	0	0
4.V.83	604	10	126	316	108	1024	3	26	0	2	0	6	0	0	0	0	0
11.V.83	611	62	224	554	311	1405	3	55	0	1	0	12	4	0	0	0	0
19.V.83	619	34	128	282	104	751	26	31	0	4	0	6	0	0	0	0	0
1.VI.83	632	88	146	171	36	823	14	26	0	7	0	4	0	0	0	0	0
8.VI.83	639	18	37	169	17	560	5	21	0	6	0	0	0	0	0	0	0
15.VI.83	646	12	59	48	4	304	10	9	0	1	0	0	0	1	0	0	0
22.VI.83	653	1	8	18	2	166	1	2	0	0	0	0	0	0	0	0	0
6.VII.83	667	21	27	27	13	457	1	2	0	1	0	0	0	0	0	0	0
20.VII.83	681	4	29	31	17	411	1	1	0	0	0	1	0	0	0	0	0
9.VIII.83	701	26	162	11	116	920	36	19	0	5	0	0	0	0	0	0	0
24.VIII.83	716	14	173	6	770	1135	172	186	0	75	0	1	0	0	0	0	0
14.IX.83	737	18	251	19	156	979	143	215	0	11	0	8	1	1	0	0	0

Appendix 5.1 Mean (se) frequency (per 50 FOV) of phytoplankton taxa initially in the enclosure experiments (1-11). See Table 5.31 for taxa codes.

	1	2	3	4	5	6	7	8	9	10	11
OO	11.00	9.00	28.50	30.00	50.00	48.50	34.50	18.85	34.50	46.50	4.00
	(2.78)	(1.41)	(0.71)	(1.41)	(0.00)	(0.71)	(6.36)	(5.03)	(6.36)	(2.12)	(1.41)
SP	10.25	4.50	13.00	10.00	1.50	0.50	2.50	0.45	3.50	24.50	5.50
	(3.20)	(6.36)	(1.41)	(4.24)	(0.71)	(0.71)	(2.12)	(0.69)	(0.71)	(3.54)	(0.71)
SS	22.00	15.50	11.00	10.50	7.00	7.00	13.00	3.45	4.00	3.50	7.00
	(8.33)	(0.71)	(11.3)	(3.54)	(0.00)	(4.24)	(5.66)	(2.14)	(0.00)	(2.12)	(1.41)
TS	10.38	4.50	5.00	0.00	7.50	8.00	32.50	26.35	2.00	10.00	1.50
	(7.29)	(0.71)	(0.00)	(0.00)	(0.71)	(1.41)	(0.71)	(5.05)	(1.41)	(2.83)	(0.71)
CN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
AN	10.50	4.00	1.50	0.00	3.00	2.00	0.00	1.10	1.00	0.50	9.50
	(2.67)	(0.00)	(0.71)	(0.00)	(0.00)	(1.41)	(0.00)	(1.02)	(0.00)	(0.71)	(0.71)
CS	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.71)	(0.71)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
F0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
F1	1.88	1.50	0.50	4.00	2.50	2.50	0.00	0.70	1.00	3.50	8.00
	(2.03)	(0.71)	(0.71)	(2.83)	(0.71)	(0.71)	(0.00)	(0.73)	(0.00)	(4.95)	(11.3)
F2	21.13	5.50	1.00	5.00	1.00	5.50	3.00	4.00	4.50	9.50	5.00
	(5.22)	(4.95)	(1.41)	(1.41)	(1.41)	(3.54)	(0.00)	(2.71)	(2.12)	(4.95)	(7.07)
F3	0.00	0.00	0.00	0.50	0.00	2.00	0.50	0.10	1.00	1.00	0.50
	(0.00)	(0.00)	(0.00)	(0.71)	(0.00)	(2.83)	(0.71)	(0.31)	(1.41)	(1.41)	(0.71)
SM	4.88	5.50	5.50	11.00	3.50	6.50	15.00	11.05	8.50	12.00	26.00
	(1.89)	(3.54)	(2.12)	(5.66)	(2.12)	(0.71)	(5.66)	(4.45)	(3.54)	(1.41)	(0.00)
CL	1.00	0.00	1.00	0.00	2.00	0.00	0.50	0.55	0.50	4.50	2.50
	(1.07)	(0.00)	(0.00)	(0.00)	(1.41)	(0.00)	(0.71)	(0.83)	(0.71)	(2.12)	(0.71)
CO	0.00	0.00	1.00	1.00	2.00	9.00	17.50	7.95	8.00	1.50	4.50
	(0.00)	(0.00)	(0.00)	(1.41)	(2.83)	(4.24)	(2.12)	(3.09)	(4.24)	(0.71)	(0.71)
OM	1.50	0.00	3.00	1.00	12.00	21.50	17.50	28.60	4.50	8.00	39.50
	(0.93)	(0.00)	(4.24)	(1.41)	(9.90)	(9.19)	(0.71)	(7.23)	(2.12)	(0.00)	(7.78)
MA	0.13	1.00	4.50	2.00	1.00	0.00	8.00	4.25	11.50	3.50	12.00
	(0.35)	(0.00)	(0.71)	(2.83)	(2.83)	(0.00)	(4.24)	(2.81)	(6.36)	(2.12)	(2.83)
GP	0.00	0.00	0.00	0.00	0.50	0.50	0.00	0.10	0.00	0.50	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.71)	(0.71)	(0.00)	(0.31)	(0.00)	(0.71)	(0.00)
CY	0.00	0.00	0.50	0.00	0.00	0.00	1.50	0.30	0.00	0.00	1.50
	(0.00)	(0.00)	(0.71)	(0.00)	(0.00)	(0.00)	(2.12)	(0.57)	(0.00)	(0.00)	(0.71)
CM	1.25	1.00	0.50	0.00	0.50	1.00	6.00	2.55	1.00	1.50	42.00
	(1.04)	(0.00)	(0.71)	(0.00)	(0.71)	(0.00)	(1.41)	(1.50)	91.41)	(0.71)	(4.24)
P1	0.38	0.00	1.50	0.00	0.00	1.50	2.00	0.15	0.50	0.00	3.00
	(0.52)	(0.00)	(0.71)	(0.00)	(0.00)	(0.71)	(1.41)	(0.37)	(0.71)	(0.00)	(1.41)
P2	0.13	0.00	0.00	1.00	1.00	1.50	0.50	0.40	1.50	0.50	1.00
	(0.35)	(0.00)	(0.00)	(1.41)	(0.00)	(2.12)	(0.71)	(0.50)	(2.12)	(0.71)	(1.41)
P3	0.00	0.00	0.00	0.50	0.00	1.50	1.50	0.50	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.71)	(0.00)	(0.71)	(0.71)	(0.61)	(0.00)	(1.41)	(0.00)
P4	0.38	0.50	0.50	0.50	1.00	1.50	0.50	0.10	0.50	0.00	0.00
	(0.52)	(0.71)	(0.71)	(0.71)	(1.41)	(0.71)	(0.71)	(0.31)	(0.71)	(0.00)	(0.00)
P5	0.00	0.00	0.00	0.00	2.00	0.50	0.00	0.05	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(2.83)	(0.71)	(0.00)	(0.22)	(0.00)	(0.00)	(0.00)
L1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
L2	0.00	0.00	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.71)	(0.00)	(0.71)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DB	0.00	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.71)	(0.00)	(0.00)	(0.71)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
PT	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.50
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.71)	(0.00)	(0.00)	(0.00)	(0.00)	(0.71)
DE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DS	0.63	1.00	1.00	0.00	0.00	2.00	9.50	1.80	0.50	0.50	32.50
	(0.52)	(1.41)	(0.00)	(0.00)	(0.00)	(1.41)	(0.71)	(1.67)	(0.71)	(0.71)	(0.71)
MV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.71)
LS	0.00	0.00	0.00	2.00	0.00	0.00	0.50	4.25	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.71)	(3.01)	(0.00)	(0.00)	(0.00)

Appendix 5.2 Mean (se) frequency (per 50 FOV) of phytoplankton taxa in the ungrazed treatments of the enclosure experiments (1-11). See Table 5.31 for taxa codes.

	1	2	3	4	5	6	7	8	9	10	11
OO	5.00	9.60	22.40	24.75	30.70	12.40	12.70	11.20	36.00	27.10	2.57
	(4.00)	(3.27)	(4.38)	(2.36)	(6.38)	(3.13)	(4.42)	(5.33)	(6.89)	(5.17)	(1.40)
SP	0.75	1.30	1.90	0.50	2.50	1.50	1.40	1.20	6.00	0.20	1.29
	(0.96)	(1.34)	(1.60)	(1.00)	(2.46)	(1.78)	(1.78)	(1.14)	(6.52)	(0.42)	(1.38)
SS	17.50	8.80	8.90	4.75	16.40	6.50	4.10	2.00	3.20	1.50	5.14
	(4.43)	(5.57)	(4.04)	(2.63)	(10.7)	(2.59)	(2.64)	(2.21)	(2.95)	(1.84)	(2.41)
TS	0.00	0.00	0.00	0.00	8.60	3.80	3.20	2.00	2.20	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(10.0)	(3.22)	(2.04)	(2.00)	(2.49)	(0.00)	(0.00)
CN	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.95)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
AN	8.00	0.01	0.20	0.00	1.30	4.00	0.60	1.00	1.40	7.40	2.43
	(3.56)	(0.32)	(0.42)	(0.00)	(1.49)	(1.70)	(0.52)	(0.94)	(2.19)	(4.17)	(1.62)
CS	2.25	1.50	3.60	0.75	0.90	13.40	2.50	1.60	0.00	0.00	2.86
	(1.50)	(1.35)	(2.01)	(0.50)	(0.88)	(3.78)	(1.27)	(1.26)	(0.00)	(0.00)	(0.90)
FO	0.00	0.20	0.00	0.00	0.00	1.70	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.42)	(0.00)	(0.00)	(0.00)	(2.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
F1	6.50	7.50	2.60	8.25	2.00	6.00	3.70	1.80	1.00	2.70	4.29
	(3.42)	(3.47)	(1.07)	(2.63)	(1.33)	(1.94)	(2.16)	(0.79)	(0.71)	(1.89)	(2.21)
F2	17.50	32.40	9.60	42.50	5.20	9.20	4.00	4.20	3.00	5.00	16.00
	(3.70)	(6.93)	(4.06)	(5.80)	(2.44)	(1.69)	(2.05)	(2.62)	(3.32)	(2.79)	(6.43)
F3	1.75	0.70	0.60	0.75	3.60	26.60	5.90	4.80	1.20	1.60	9.14
	(0.50)	(0.82)	(0.70)	(0.50)	(1.17)	(7.88)	(1.19)	(3.74)	(1.10)	(1.35)	(2.34)
SM	17.25	29.10	5.30	1.25	30.10	8.30	6.80	13.40	8.80	8.70	4.14
	(11.7)	(12.8)	(3.06)	(1.50)	(18.2)	(7.17)	(3.91)	(11.2)	(2.05)	(3.13)	(4.14)
CL	0.25	0.60	0.00	0.00	0.10	0.60	4.30	0.90	3.80	4.70	4.86
	(0.50)	(0.70)	(0.00)	(0.00)	(0.32)	(0.70)	(1.89)	(1.10)	(3.56)	(2.45)	(3.39)
CO	0.50	0.60	0.10	0.00	7.00	5.70	12.80	3.70	0.40	0.60	0.29
	(1.00)	(0.84)	(0.32)	(0.00)	(2.98)	(1.95)	(6.89)	(2.50)	(0.55)	(1.26)	(0.76)
OM	1.00	0.50	0.00	0.00	4.80	1.00	1.30	1.10	0.00	0.30	0.29
	(1.41)	(0.71)	(0.00)	(0.00)	(5.07)	(0.94)	(1.25)	(0.99)	(0.00)	(0.67)	(0.76)
MA	0.25	0.20	0.00	0.00	0.00	1.00	6.90	11.60	3.20	5.00	18.14
	(0.50)	(0.42)	(0.00)	(0.00)	(0.00)	(1.49)	(2.18)	(7.35)	(1.79)	(2.40)	(5.40)
GP	0.75	0.90	2.20	0.50	0.50	0.50	0.30	0.40	0.20	0.50	0.14
	(0.96)	(1.10)	(1.62)	(1.00)	(0.71)	(0.71)	(0.48)	(0.52)	(0.45)	(0.71)	(0.38)
CY	48.25	49.30	44.80	49.50	31.70	26.80	26.00	25.70	0.60	0.60	24.00
	(1.50)	(1.06)	(3.08)	(1.00)	(16.9)	(7.24)	(8.07)	(14.7)	(0.89)	(0.70)	(18.4)
CM	0.75	0.40	0.90	0.00	0.30	4.60	7.50	5.80	1.80	0.60	30.57
	(0.96)	(0.70)	(0.74)	(0.00)	(0.67)	(1.71)	(2.99)	(3.36)	(1.10)	(0.84)	(5.26)
P1	5.25	3.90	6.80	6.75	4.70	2.50	5.20	0.80	0.20	0.70	2.14
	(3.30)	(1.66)	(2.97)	(4.11)	(2.71)	(1.58)	(3.08)	(0.79)	(0.45)	(1.06)	(1.07)
P2	18.00	6.80	20.10	38.50	10.00	11.10	20.60	1.90	2.40	1.20	6.14
	(8.91)	(3.08)	(8.91)	911.7)	(2.36)	(4.36)	(8.90)	(1.52)	(2.51)	(1.55)	(3.76)
P3	3.00	1.80	5.00	6.50	6.20	31.30	16.40	0.70	0.20	0.50	11.70
	(2.58)	(1.62)	(3.53)	(2.08)	(1.87)	(8.99)	(3.20)	(0.67)	(0.45)	(1.08)	(1.70)
P4	10.00	10.80	14.90	28.75	6.60	5.80	7.80	1.00	0.80	0.90	5.86
	(4.32)	(5.43)	(10.4)	(7.68)	(3.47)	(2.53)	(3.97)	(1.25)	(0.84)	(1.29)	(2.79)
P5	6.75	5.30	11.40	14.50	3.70	0.60	2.80	0.20	0.20	0.20	2.43
	(2.36)	(2.21)	(10.2)	(4.65)	(2.91)	(0.70)	(2.10)	(0.42)	(0.45)	(0.42)	(1.27)
L1	1.00	1.30	4.70	4.25	0.30	0.10	1.10	0.20	0.00	0.10	0.00
	(0.82)	(1.64)	(3.92)	(2.63)	(0.48)	(0.32)	(1.10)	(0.42)	(0.00)	(0.32)	(0.00)
L2	0.75	0.90	8.50	4.50	0.40	0.20	2.10	0.30	0.20	0.30	0.57
	(0.96)	(0.99)	(8.07)	(3.00)	(0.70)	(0.42)	(1.73)	(0.67)	(0.45)	(0.67)	(0.79)
DB	1.75	2.30	8.80	6.75	0.60	0.30	3.70	0.70	0.20	0.20	0.00
	(1.50)	(1.57)	(9.11)	(3.40)	(0.70)	(0.67)	(1.70)	(1.06)	(0.45)	(0.42)	(0.00)
PT	0.00	0.00	1.50	0.75	0.10	0.30	0.00	0.00	0.00	0.10	0.14
	(0.00)	(0.00)	(1.27)	(0.96)	(0.32)	(0.48)	(0.00)	(0.00)	(0.00)	(0.32)	(0.38)
DE	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(1.25)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DS	0.00	0.20	0.30	0.75	1.40	7.80	5.30	4.20	0.20	0.20	25.00
	(0.00)	(0.63)	(0.48)	(0.96)	(1.35)	(3.99)	(2.36)	(1.75)	(0.45)	(0.42)	(5.00)
MV	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.00	0.10	3.43
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.63)	(0.42)	(0.42)	(0.00)	(0.32)	(2.07)
LS	4.75	1.20	0.00	0.00	0.00	0.00	0.40	1.00	5.80	1.40	1.43
	(2.99)	(0.92)	(0.00)	(0.00)	(0.00)	(0.00)	(0.70)	(1.05)	(1.48)	(1.51)	(1.40)

Appendix 5.3 Mean (se) frequency (per 50 FOV) of phytoplankton taxa in the grazed treatments of the enclosure experiments (1-11). See Table 5.31 for taxa codes.

	1	2	3	4	5	6	7	8	9	10	11
OO	9.00	13.78	23.30	33.00	27.60	15.30	16.50	12.20	31.75	27.14	4.43
	(5.72)	(6.22)	(6.58)	(9.06)	(5.08)	(4.50)	(3.47)	(5.67)	(7.94)	(7.52)	(3.69)
SP	5.00	6.11	0.10	1.00	1.90	2.50	2.20	3.40	5.13	1.00	2.00
	(3.56)	(3.10)	(0.32)	(0.82)	(1.79)	(1.84)	(1.32)	(3.69)	(4.55)	(1.15)	(1.41)
SS	12.50	5.11	2.40	3.25	13.70	5.40	3.40	1.30	1.38	2.00	3.71
	(3.70)	(3.22)	(1.35)	(2.63)	(3.80)	(2.59)	(2.99)	(1.83)	(1.30)	(2.45)	(3.30)
TS	0.00	0.00	0.00	0.00	29.50	6.50	4.80	2.50	2.75	0.29	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(10.7)	(4.50)	(2.57)	(2.76)	(2.82)	(0.49)	(0.00)
CN	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.67)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
AN	1.00	0.44	0.00	0.25	3.40	6.00	0.00	0.50	3.88	6.86	3.43
	(1.15)	(0.73)	(0.00)	(0.50)	(2.76)	(4.00)	(0.00)	(0.53)	(2.70)	(5.73)	(2.99)
CS	0.00	0.00	0.00	0.00	0.30	1.00	0.20	0.00	0.00	0.00	0.14
	(0.00)	(0.00)	(0.00)	(0.00)	(0.48)	(1.63)	(0.42)	(0.00)	(0.00)	(0.00)	(0.38)
F0	0.00	0.00	0.00	0.00	0.00	0.10	1.30	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.32)	(2.00)	(0.00)	(0.00)	(0.00)	(0.00)
F1	1.75	1.56	0.20	1.00	0.50	1.30	3.60	0.70	1.00	1.00	1.57
	(1.50)	(1.74)	(0.42)	(1.41)	(0.53)	(0.82)	(1.35)	(0.67)	(0.93)	(1.15)	(0.79)
F2	2.75	2.78	1.10	5.00	2.50	2.40	4.40	2.50	2.75	2.71	1.57
	(2.50)	(1.48)	(0.74)	(3.37)	(1.72)	(1.58)	(2.32)	(2.55)	(1.83)	(1.89)	(1.51)
F3	0.25	0.22	0.00	0.00	0.70	1.80	1.40	0.80	1.25	0.57	1.29
	(0.50)	(0.44)	(0.00)	(0.00)	(0.82)	(2.25)	(1.17)	(1.03)	(1.16)	(0.98)	(1.11)
SM	13.50	12.44	4.30	1.50	29.80	6.40	2.50	1.80	2.63	3.86	5.43
	(6.86)	(7.99)	(2.79)	(1.29)	(21.1)	(3.44)	(2.37)	(2.04)	(1.19)	(2.73)	(2.15)
CL	0.50	0.78	0.00	0.00	0.90	1.50	2.40	2.60	9.13	4.71	4.14
	(1.00)	(1.30)	(0.00)	(0.00)	(1.10)	(1.08)	(2.27)	(3.66)	(6.08)	(2.21)	(2.79)
CO	0.00	0.00	0.00	0.25	3.10	0.90	2.80	0.90	0.25	0.43	0.14
	(0.00)	(0.00)	(0.00)	(0.50)	(2.18)	(0.74)	(1.55)	(1.29)	(0.46)	(0.79)	(0.38)
OM	0.00	0.56	0.00	0.00	7.20	1.50	1.90	0.50	0.25	0.00	0.00
	(0.00)	(0.73)	(0.00)	(0.00)	(3.61)	(1.65)	(1.45)	(0.85)	(0.46)	(0.00)	(0.00)
MA	0.00	0.22	0.10	0.00	0.00	0.70	0.30	2.00	1.00	0.71	8.14
	(0.00)	(0.67)	(0.32)	(0.00)	(0.00)	(0.95)	(0.48)	(1.49)	(1.31)	(0.95)	(2.73)
GP	1.50	1.78	2.10	1.25	0.80	0.50	0.80	0.50	0.25	0.71	0.29
	(1.73)	(1.39)	(1.66)	(0.96)	(0.63)	(0.53)	(1.03)	(0.97)	(0.46)	(0.49)	(0.49)
CY	0.25	0.44	5.20	2.50	16.30	5.40	2.30	0.00	0.13	0.14	0.29
	(0.50)	(0.53)	(4.08)	(1.29)	(16.1)	(1.65)	(1.89)	(0.00)	(0.35)	(0.38)	(0.76)
CM	0.25	0.44	0.10	0.25	0.70	1.00	1.60	7.10	1.63	1.00	20.00
	(0.50)	(0.53)	(0.32)	(0.50)	(1.06)	(0.94)	(1.51)	(3.75)	(0.74)	(0.82)	(7.48)
P1	3.50	3.56	6.50	1.50	3.20	3.60	3.80	3.30	2.25	0.29	3.00
	(3.70)	(2.13)	(2.76)	(1.73)	(1.55)	(1.65)	(2.30)	(2.95)	(1.58)	(0.49)	(2.52)
P2	2.50	4.67	16.50	13.50	5.60	13.70	5.40	4.80	5.88	3.71	5.14
	(2.52)	(3.54)	(1.84)	(3.11)	(2.55)	(5.21)	(2.22)	(5.83)	(3.94)	(2.56)	(0.90)
P3	1.00	2.44	2.90	1.50	7.50	34.80	15.00	11.30	7.25	2.29	6.14
	(2.00)	(1.94)	(1.37)	(0.58)	(4.53)	(5.18)	(5.60)	(12.1)	(2.66)	(1.11)	(2.73)
P4	4.50	9.22	12.50	5.75	2.60	5.10	2.70	0.90	0.88	0.57	0.14
	(1.91)	(3.60)	(4.35)	(2.99)	(1.71)	(2.92)	(1.95)	(1.60)	(0.83)	(0.53)	(0.38)
P5	2.00	5.33	7.90	1.50	1.10	1.90	2.10	0.20	0.25	0.00	0.29
	(2.16)	(2.96)	(3.75)	(0.58)	(1.10)	(3.35)	(1.45)	(0.42)	(0.46)	(0.00)	(0.49)
L1	0.00	0.00	3.70	1.00	0.20	0.00	0.20	0.00	0.00	0.14	0.00
	(0.00)	(0.00)	(2.26)	(1.41)	(0.42)	(0.00)	(0.42)	(0.00)	(0.00)	(0.38)	(0.00)
L2	0.00	0.33	5.70	1.00	0.60	0.30	1.80	0.40	0.63	0.14	0.29
	(0.00)	(0.71)	(3.33)	(1.41)	(0.70)	(0.48)	(1.62)	(0.52)	(1.06)	(0.38)	(0.49)
DB	0.25	0.56	3.20	2.50	0.80	0.20	1.10	0.10	0.00	0.14	0.00
	(0.50)	(0.88)	(2.30)	(2.08)	(1.03)	(0.42)	(0.99)	(0.32)	(0.00)	(0.38)	(0.00)
PT	0.00	0.11	2.10	0.00	0.40	0.20	0.20	0.50	0.00	0.00	0.00
	(0.00)	(0.33)	(1.45)	(0.00)	(0.70)	(0.42)	(0.42)	(0.85)	(0.00)	(0.00)	(0.00)
DE	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.82)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
DS	0.25	0.44	0.20	0.25	0.60	0.90	0.40	4.00	0.75	0.43	13.00
	(0.50)	(0.53)	(0.42)	(0.50)	(0.70)	(0.74)	(0.52)	(2.91)	(1.16)	(0.53)	(5.54)
MV	0.00	0.00	0.00	0.25	0.10	0.60	0.10	0.30	0.38	0.00	1.29
	(0.00)	(0.00)	(0.00)	(0.50)	(0.32)	(0.52)	(0.32)	(0.48)	(0.52)	(0.00)	(1.70)
LS	3.25	1.33	0.00	0.00	0.00	0.00	0.40	1.30	7.88	1.14	1.14
	(0.96)	(1.12)	(0.00)	(0.00)	(0.00)	(0.00)	(0.72)	(2.67)	(3.44)	(1.07)	(1.21)

Merrick, C. J. & Ganf, G. G. (1988) Effects of zooplankton grazing on phytoplankton communities in Mt Bold Reservoir, South Australia, using enclosures. *Marine and Freshwater Research 39*(4), 503-523.