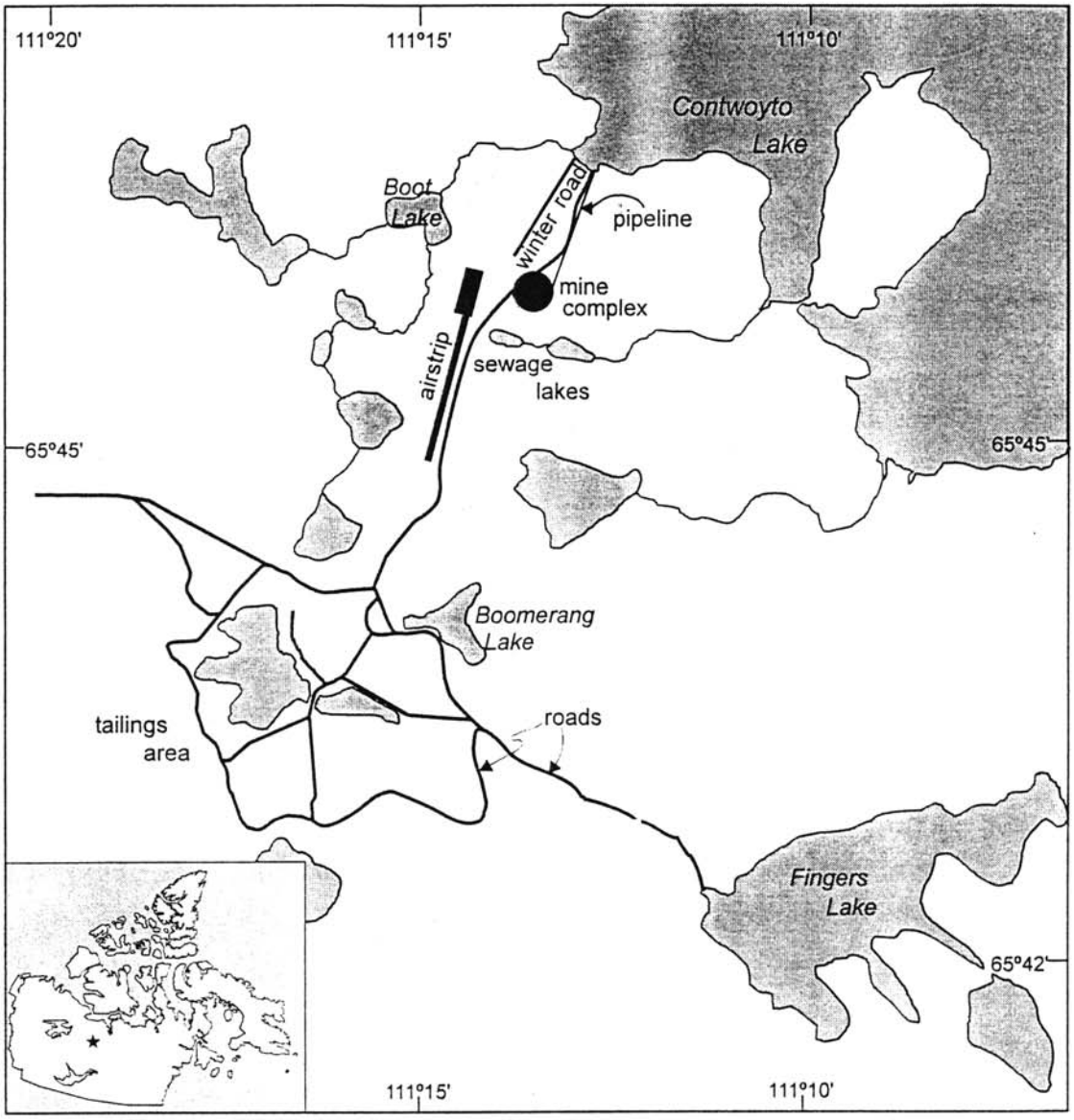


Figure 1. Lupin mine, Contwoyto Lake, NWT.

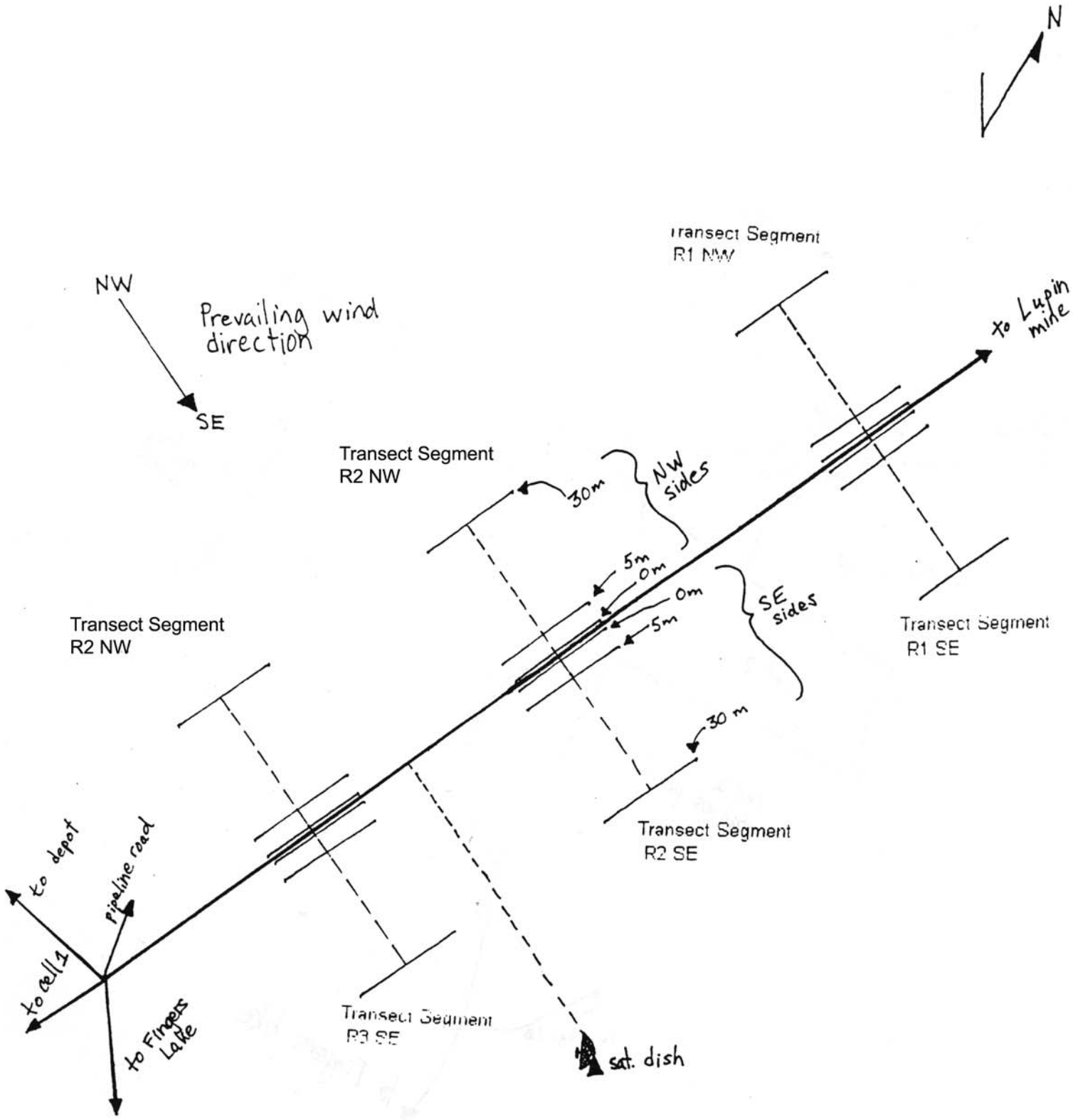


Figure 2. Transects along the road to the tailings area for dust collection and vegetation sample sites, Lupin mine, NWT, 1996-97.

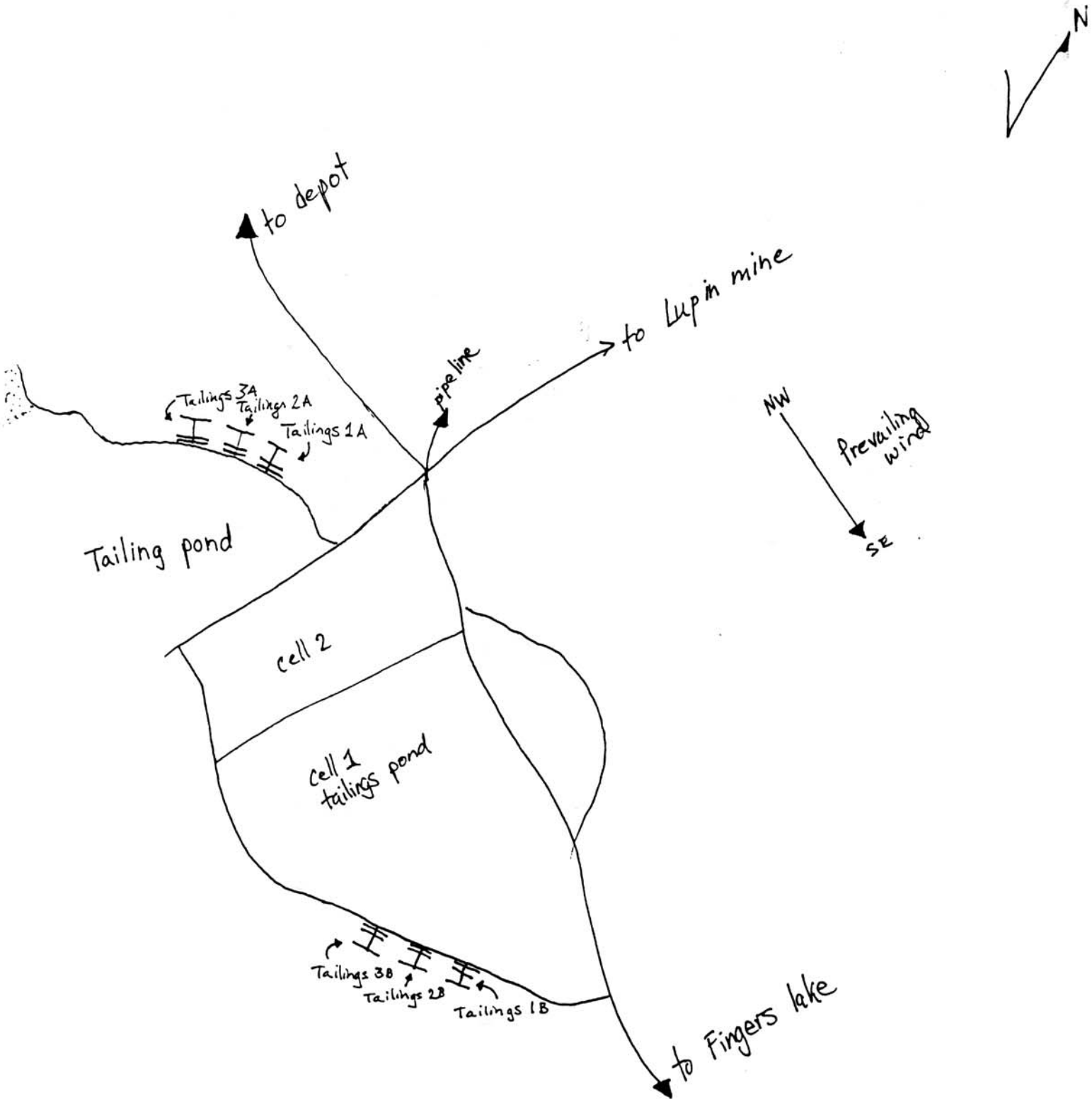


Figure 3. Transects at the tailings area for dust collection and vegetation sample sites, Lupin mine, NWT, 1996-97.

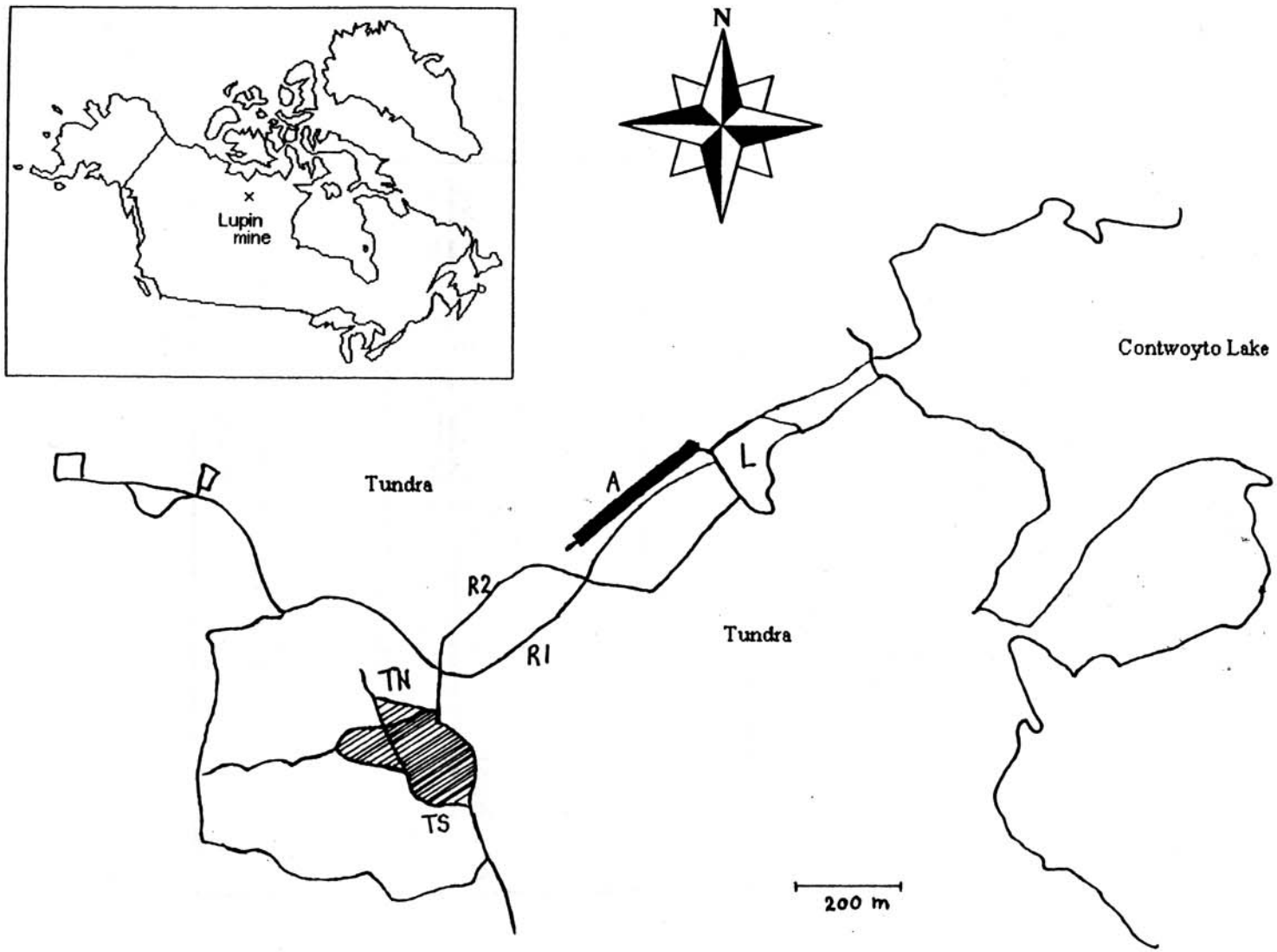


Figure 1. Lupin mine local situation map, showing roads and tailing pond study sites. L= Lupin mine complex; R1 & R2 = road study sites; TN & TS = north and south tailing pond study sites; A= airstrip. For a geographic position of the Lupin mine at 65° 46'N and 111° 14'W, see insert.

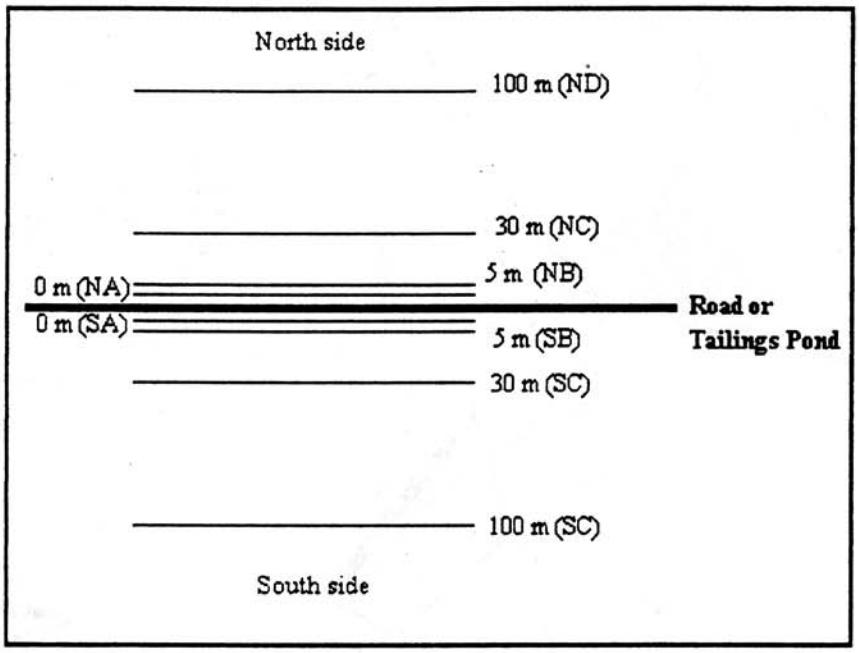


Figure 2. Design of sampling zones at the road and tailings sites. The zones were spaced at 0 m (margins of road and tailings pond), 5 m, 30 m, and 100 m distances and were 1 m wide.

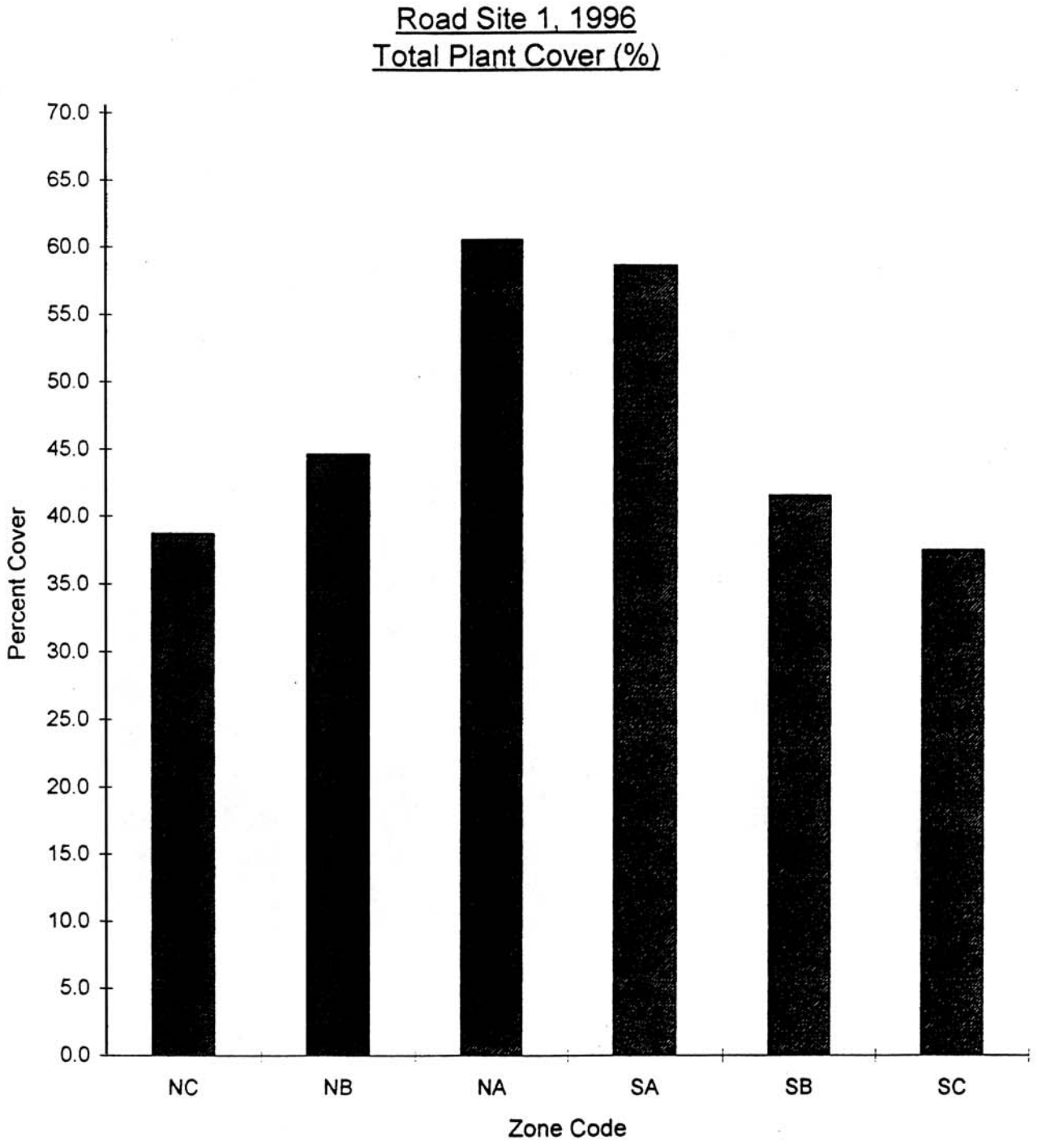


Figure 3 . Gravel Road 1, 1996, total plant cover (%) in zones of a northern and southern zone transect (mean; n= 45). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

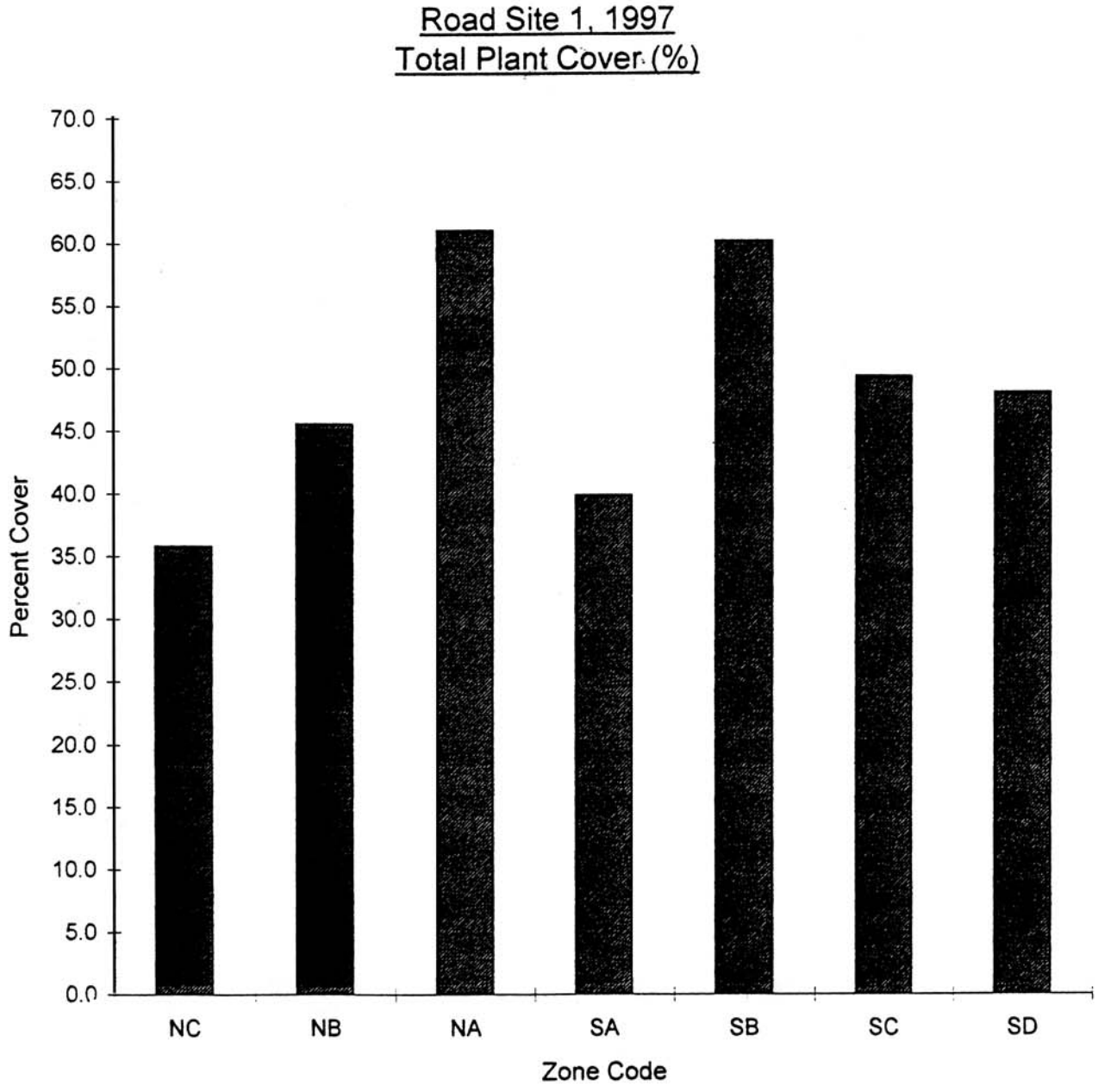


Figure 4. Gravel Road 1, 1997, total plant cover (%) in zones of a northern and southern zone transect (mean; n= 45). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

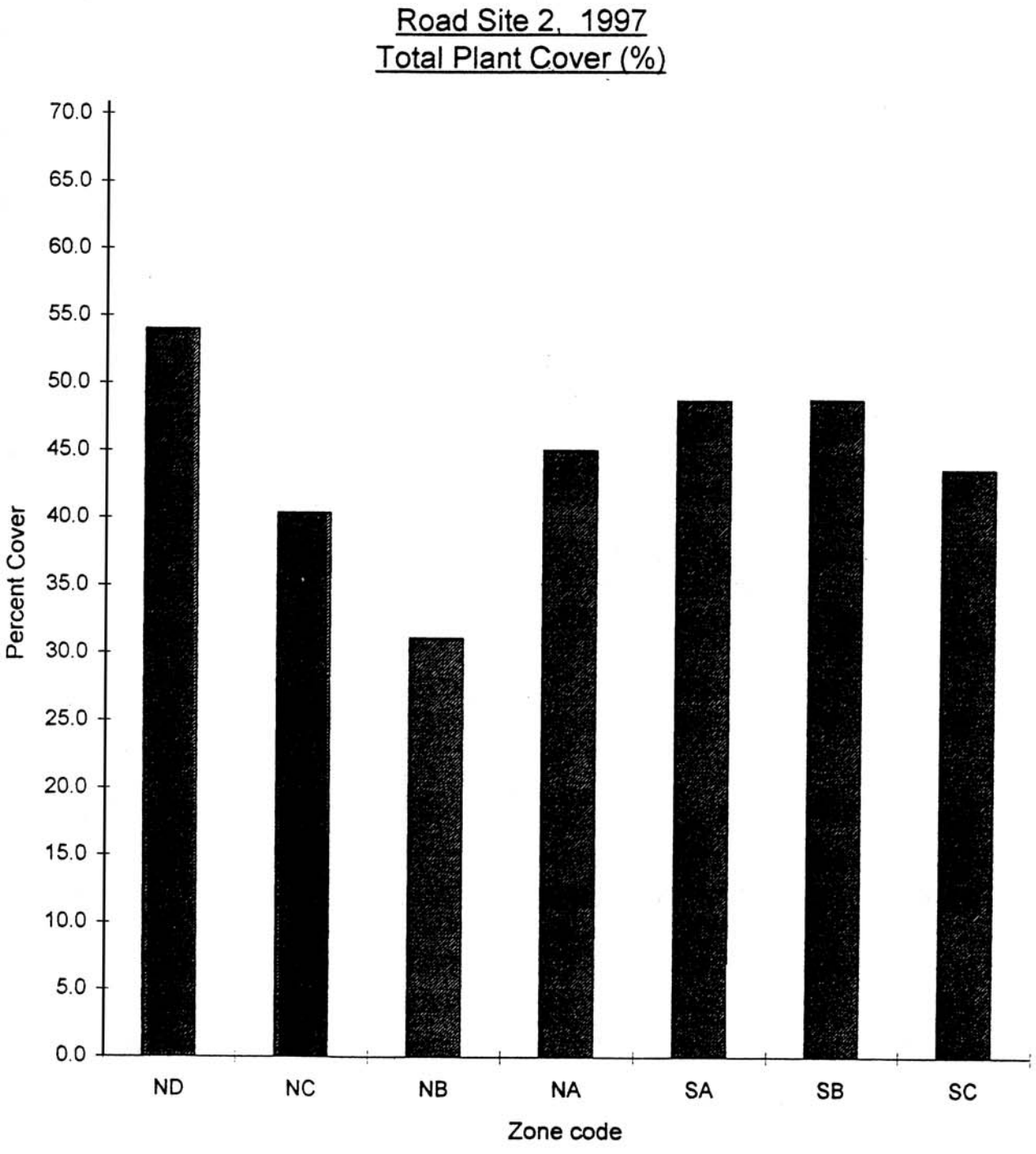


Figure 5. Gravel Road 2, 1997, total plant cover (%) in zones of a northern and southern zone transect (mean; n= 45). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

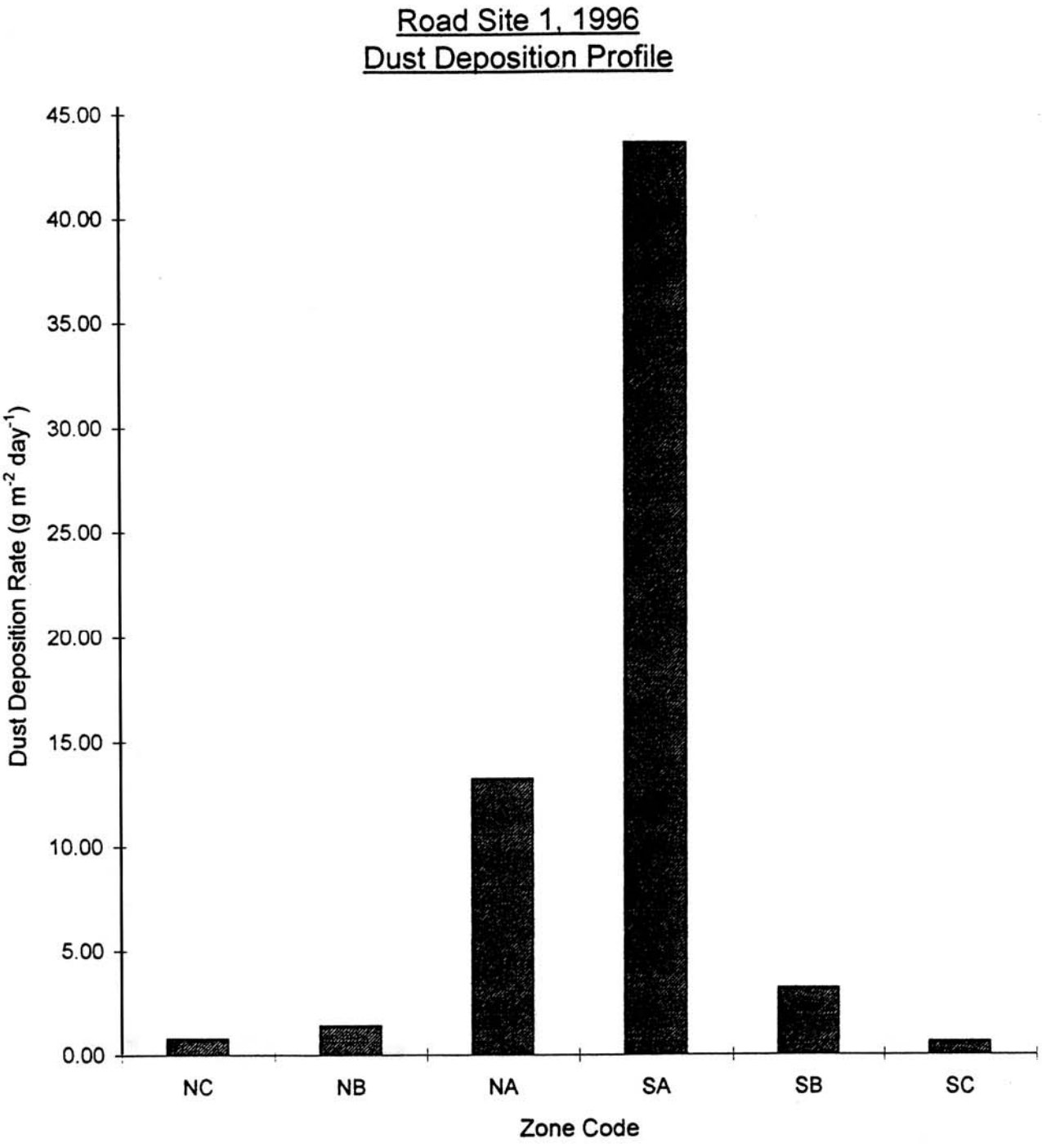


Figure 6 . Gravel Road 1, 1996, dust deposition rates in zones of a northern and southern zone transect (mean; n= 9). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

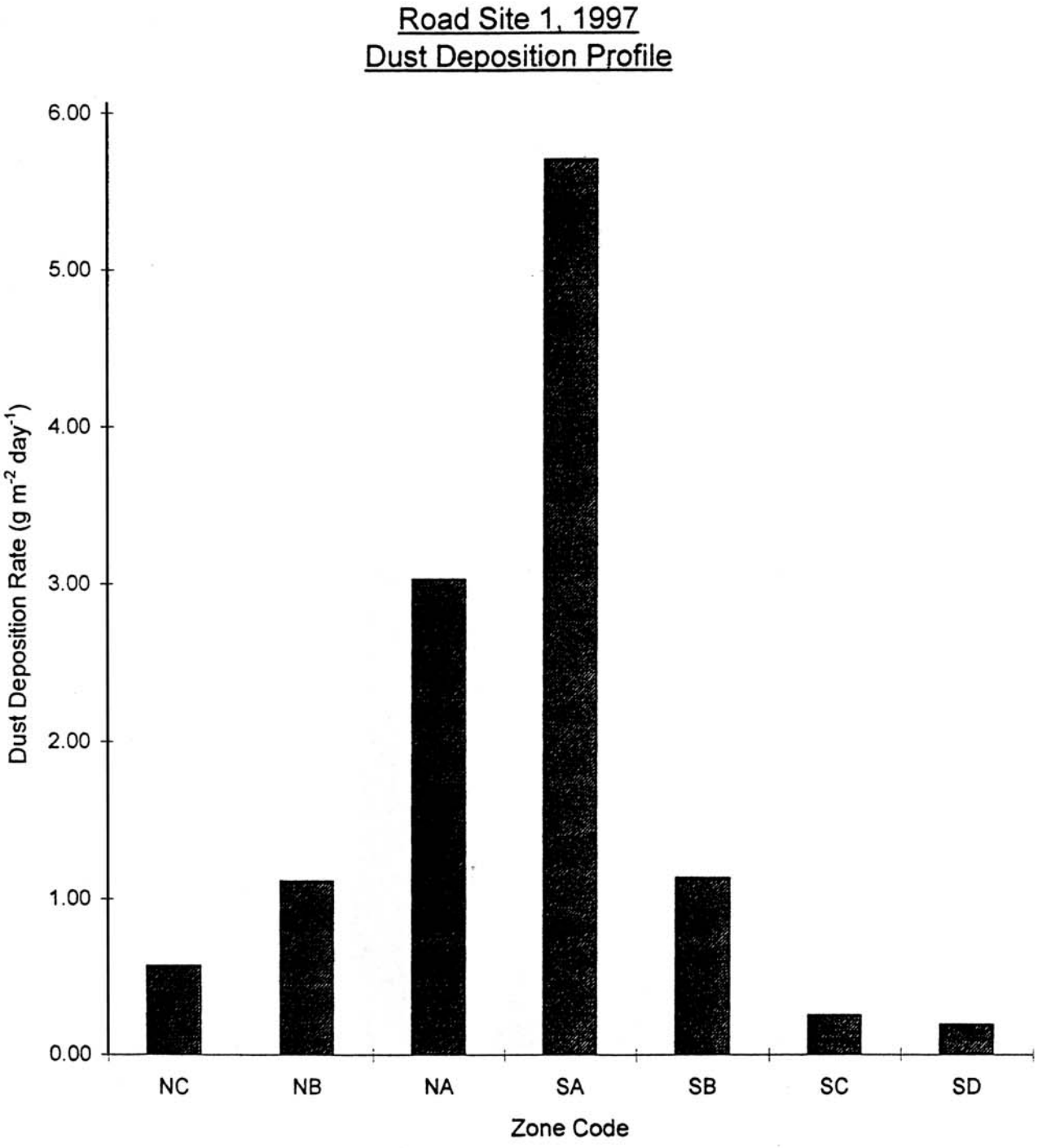


Figure 7 . Gravel Road 1, 1997, dust deposition rates in zones of a northern and southern zone transect (mean; n= 27). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

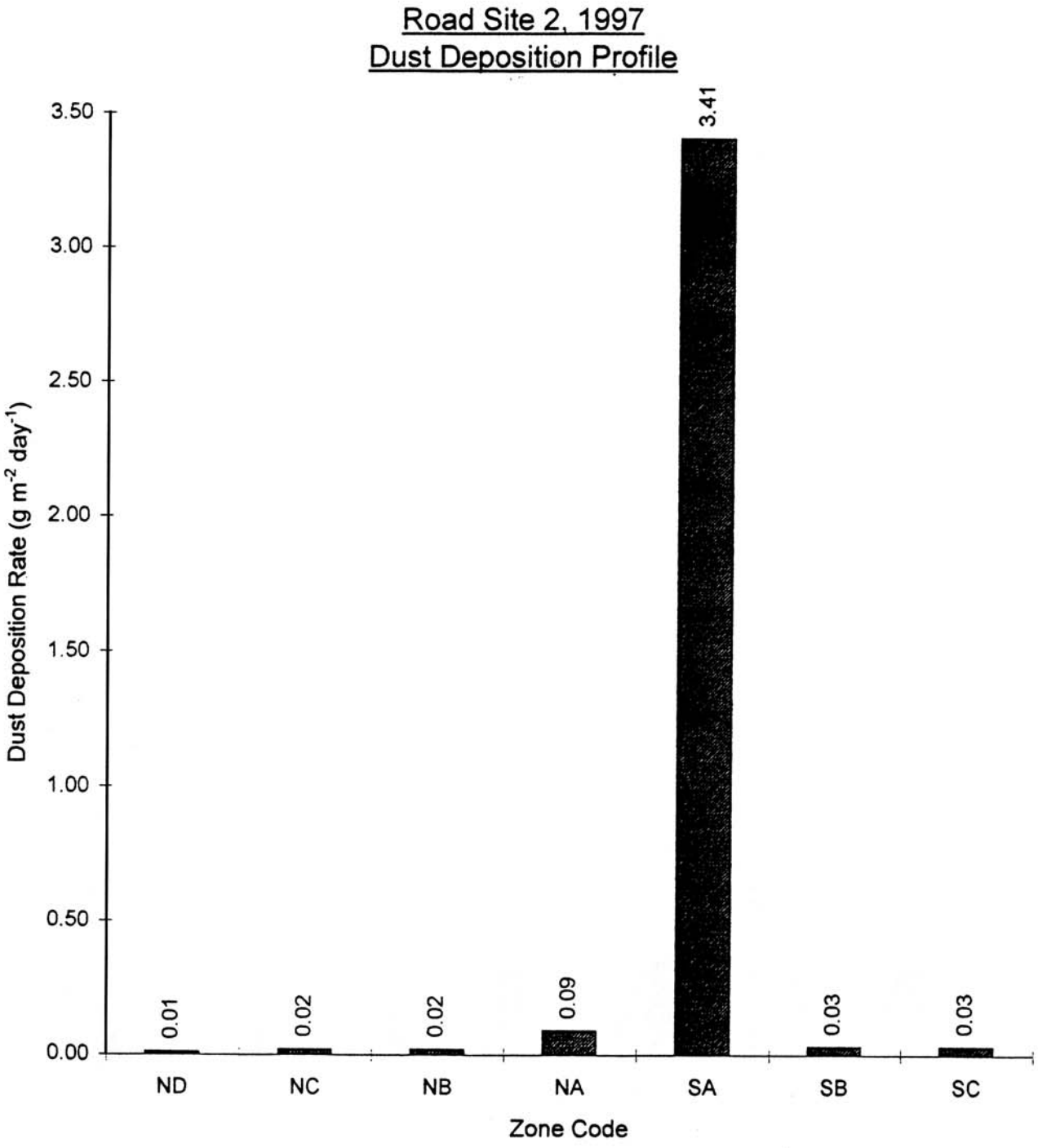


Figure 8 . Gravel Road 2, 1997, dust deposition rates in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

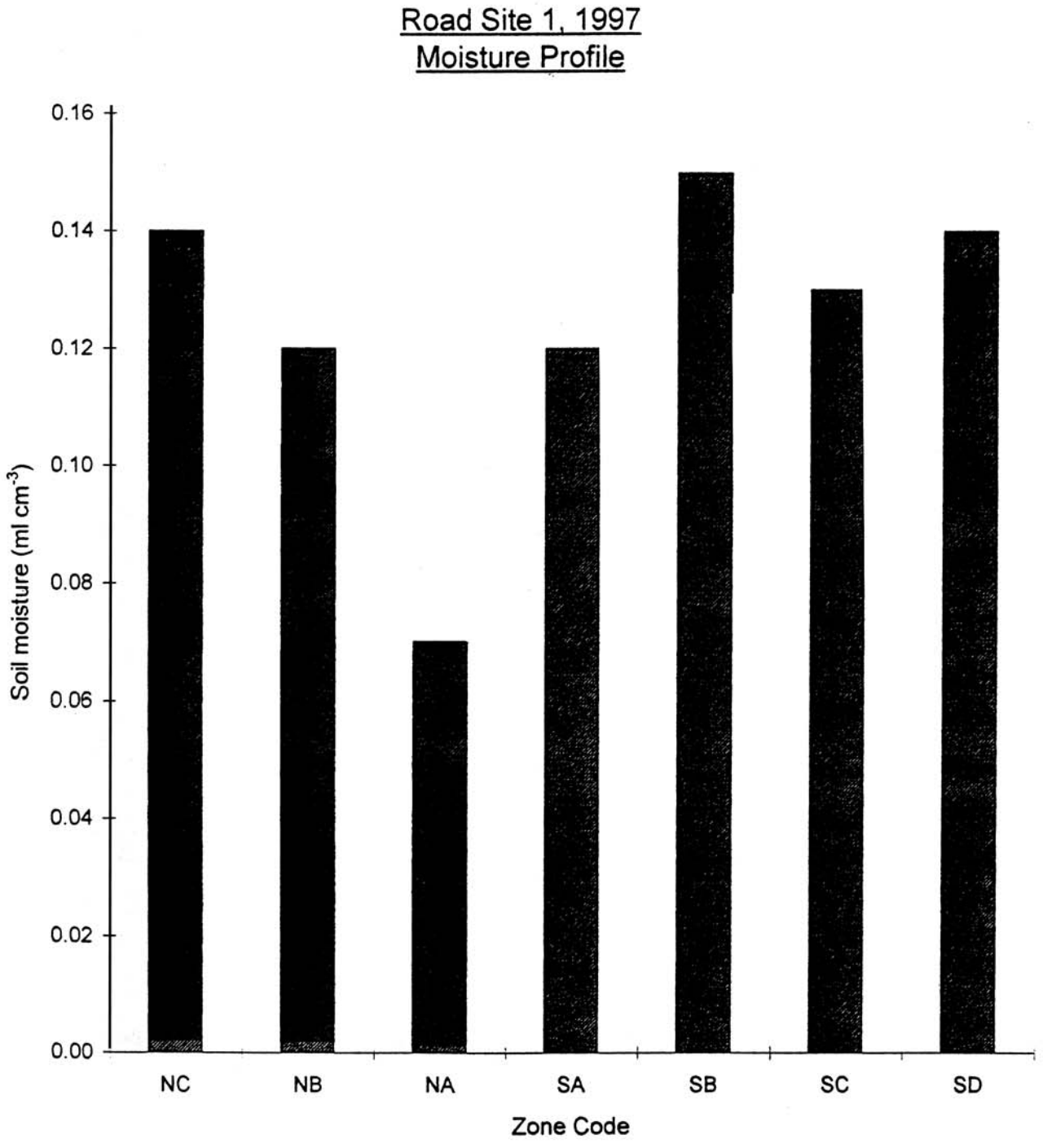


Figure 9. Gravel Road 1, 1997, soil moisture content per volume in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

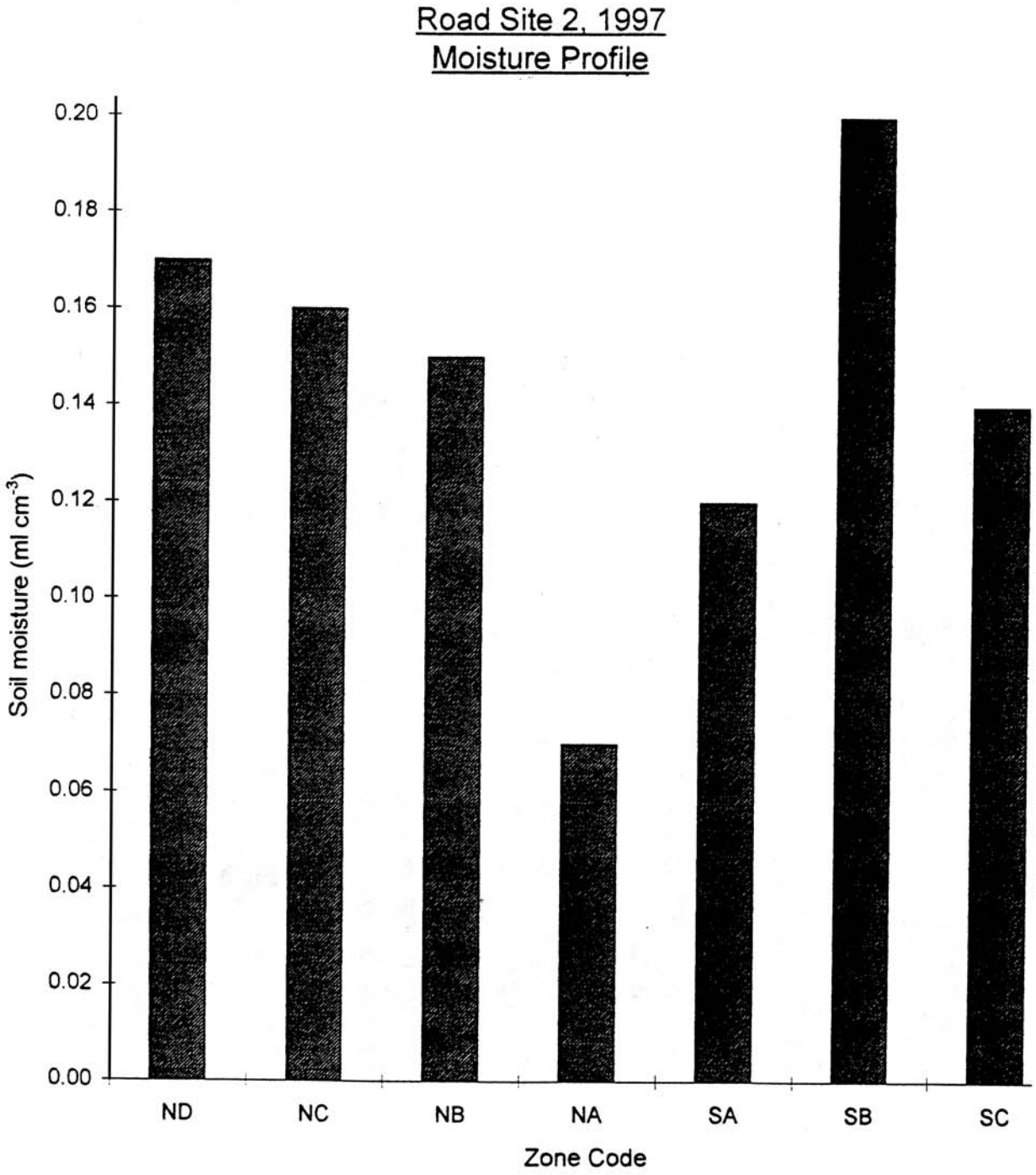


Figure 10. Gravel Road 2, 1997, soil moisture content per volume in zones of a northern and southern zone transect (mean; n= 12). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

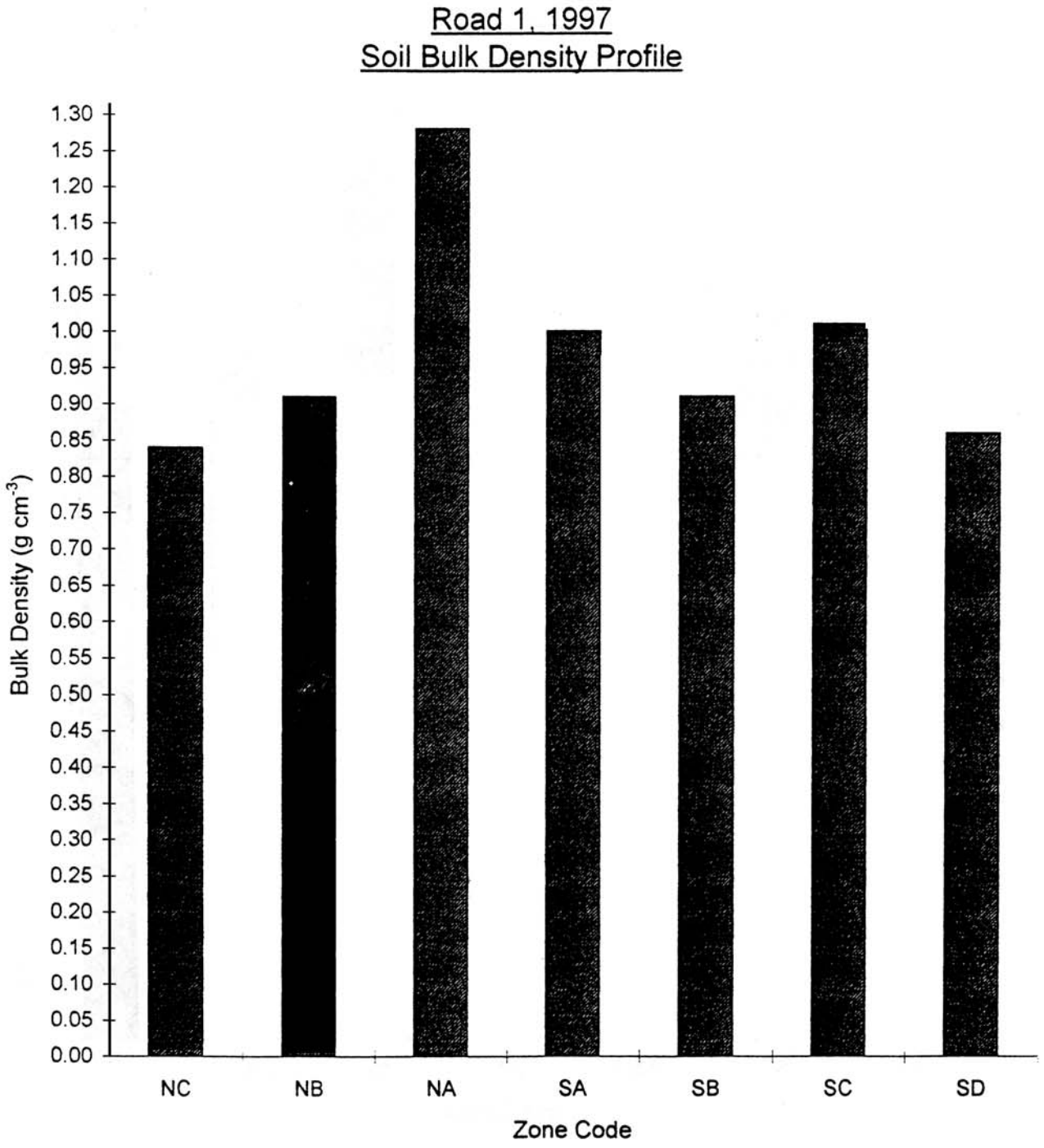


Figure 11. Gravel Road 1, 1997, soil mass (bulk density) in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

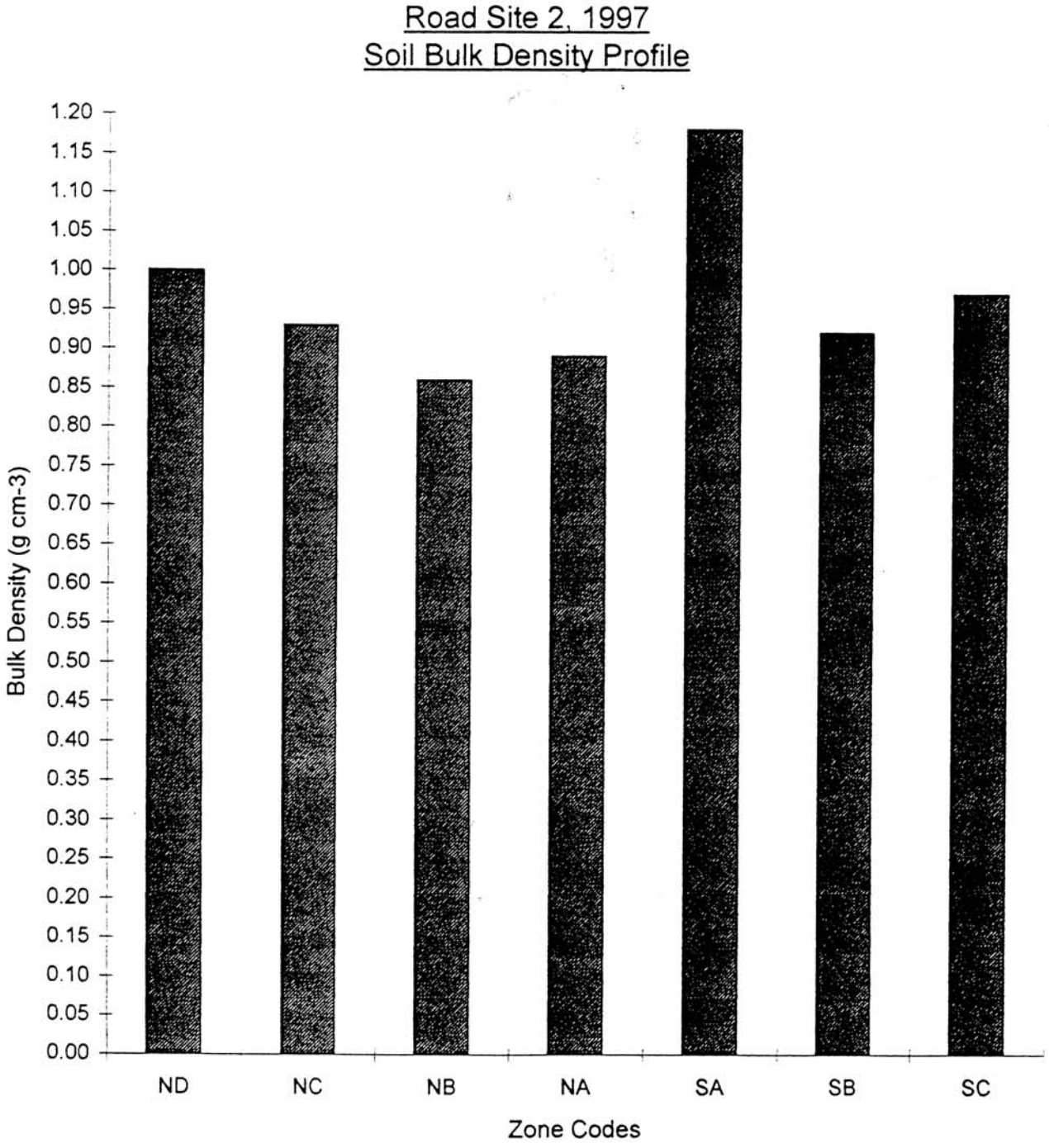


Figure 12. Gravel Road 2, 1997, soil mass (bulk density) in zones of a northern and southern zone transect (mean; n= 12). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

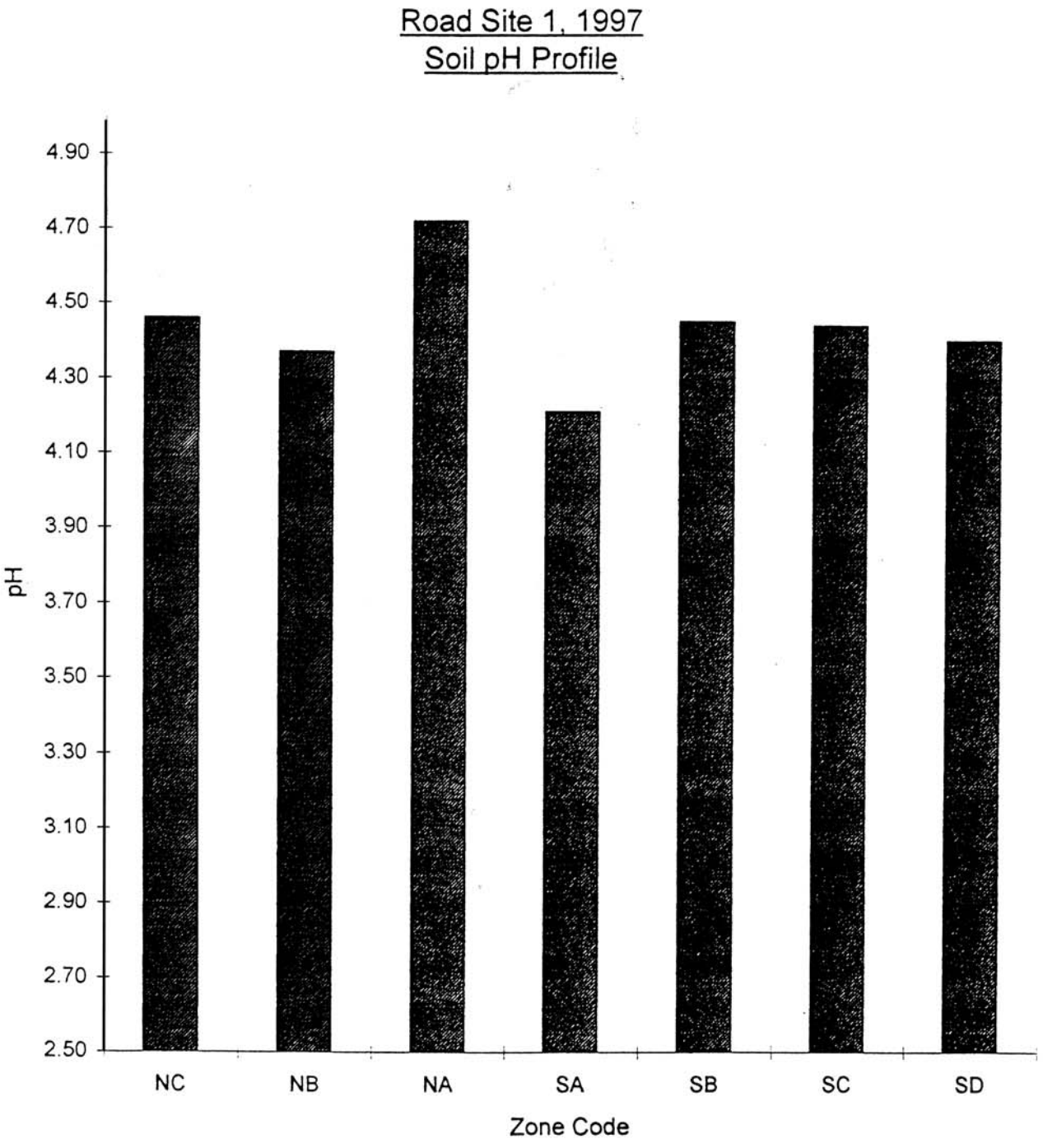


Figure 13. Gravel Road 1, 1997, soil pH in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

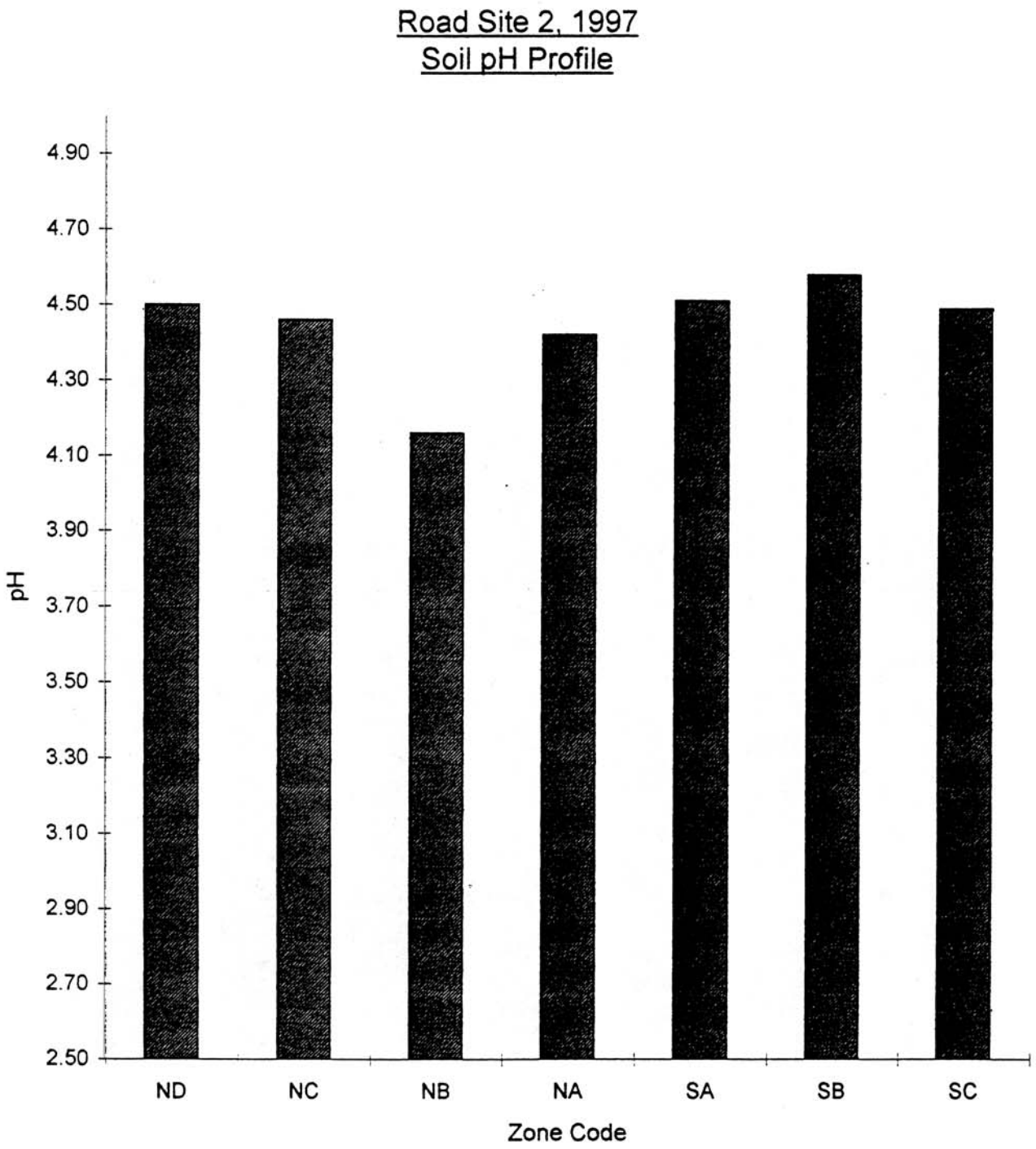


Figure 14. Gravel Road 2, 1997, soil pH in zones of a northern and southern zone transect (mean; n= 12). For exact values see Appendix 2.0. For legend to zones see Fig. 2.

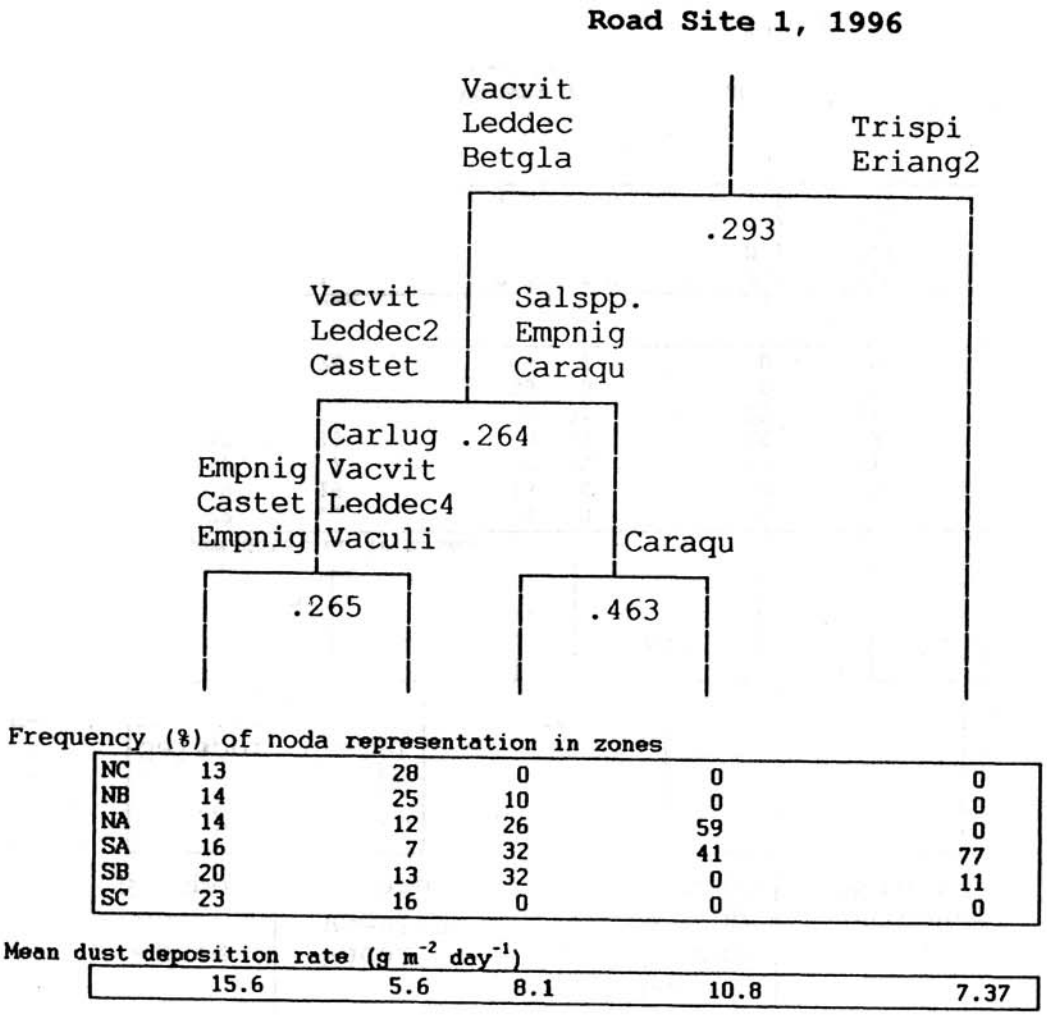
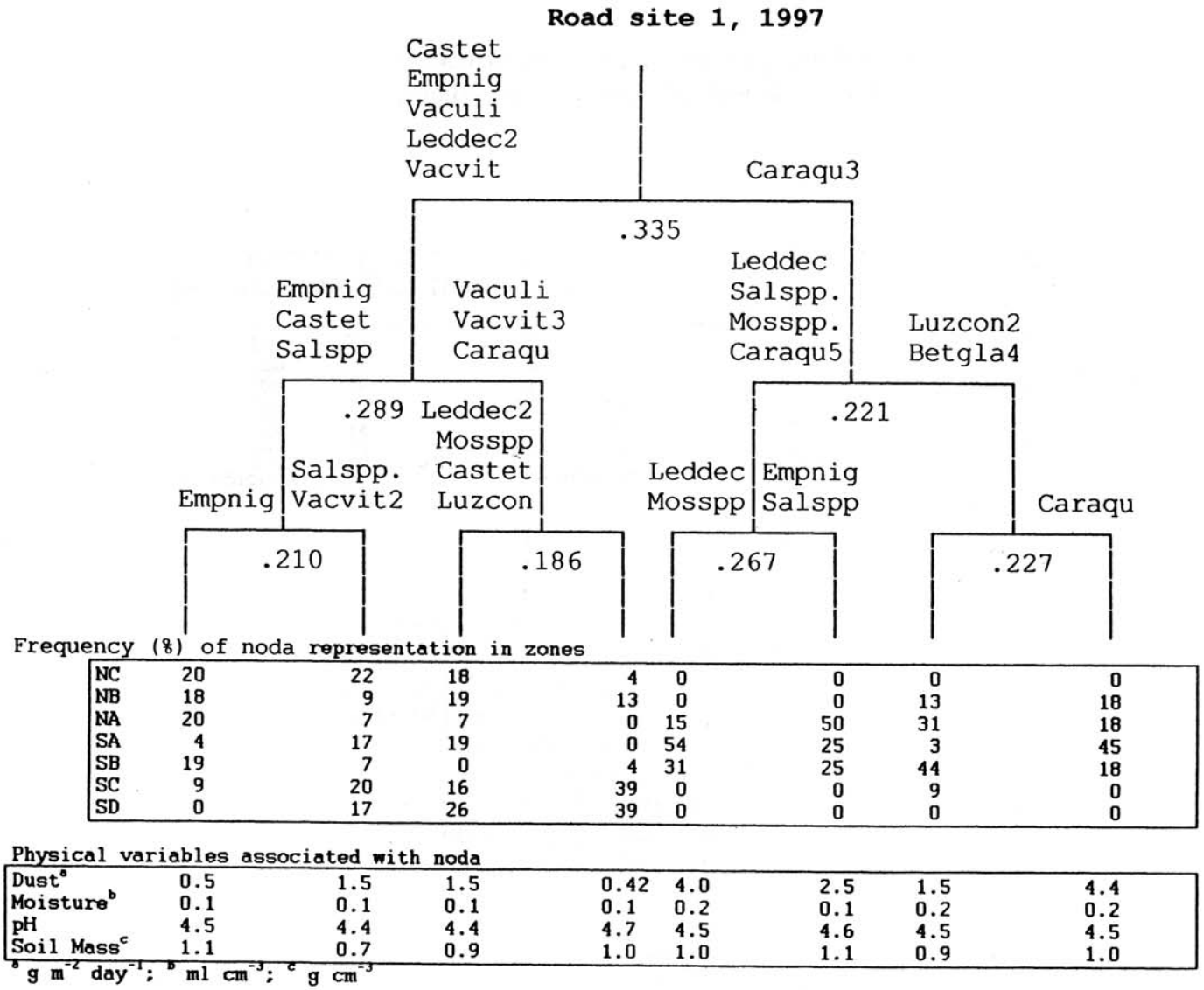


Figure 15. Road site 1, 1996. TWINSPAN dendrogram (Two-way indicator species analysis). Vegetation noda developed to 3 levels. Eigenvalues and indicator species are shown at each division. For decoding of indicator species, see Appendix 1. For legend to zone codes see Fig. 2.



Frequency (%) of noda representation in zones

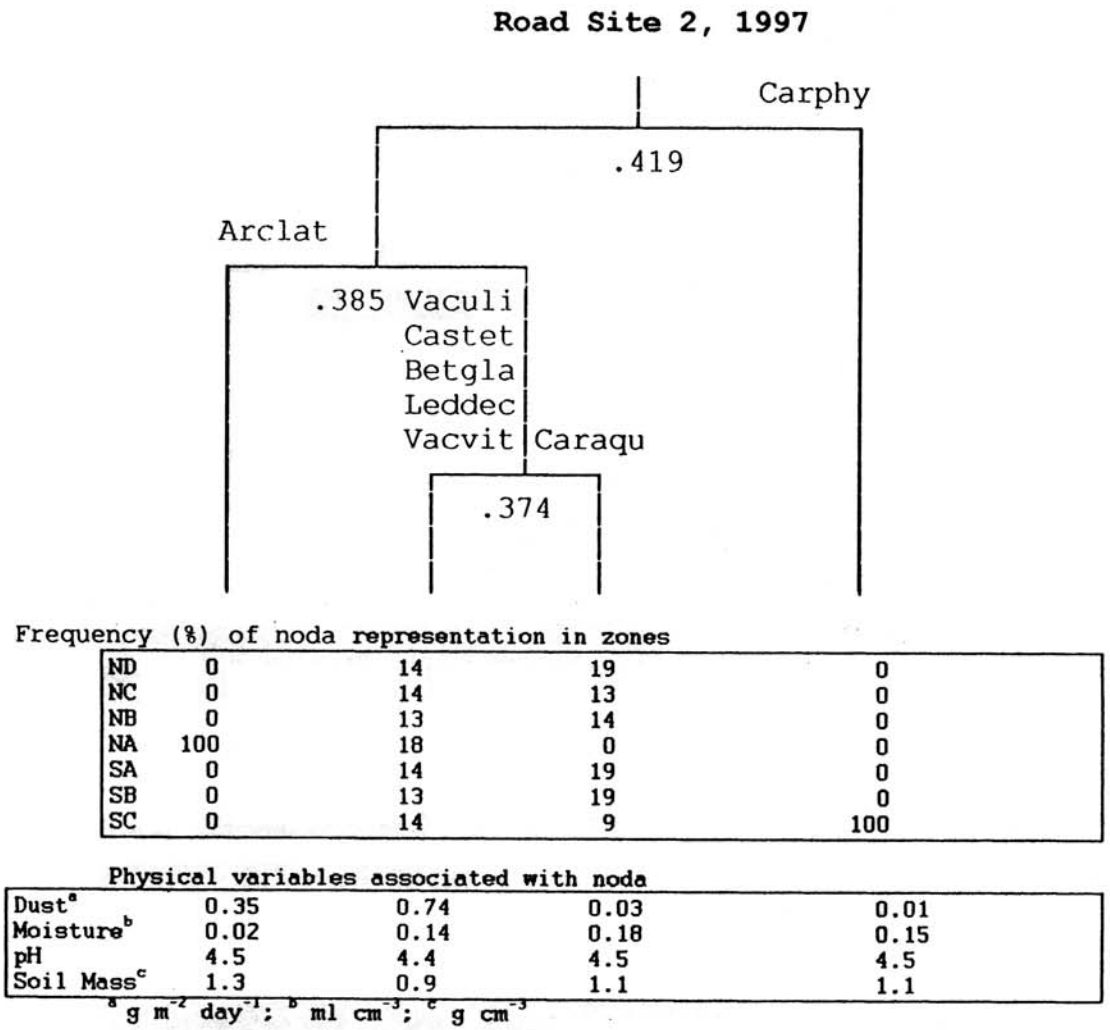
NC	20	22	18	4	0	0	0	0
NB	18	9	19	13	0	0	13	18
NA	20	7	7	0	15	50	31	18
SA	4	17	19	0	54	25	3	45
SB	19	7	0	4	31	25	44	18
SC	9	20	16	39	0	0	9	0
SD	0	17	26	39	0	0	0	0

Physical variables associated with noda

Dust[a]	0.5	1.5	1.5	0.42	4.0	2.5	1.5	4.4
Moisture[b]	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2
pH	4.5	4.4	4.4	4.7	4.5	4.6	4.5	4.5
Soil Mass[c]	1.1	0.7	0.9	1.0	1.0	1.1	0.9	1.0

[a] g m^{-2} day^{-1}; [b] ml cm^{-3}; [c] g cm^{-3}

Figure 16. Road site 1, 1997. TWINSPAN dendrogram (Two-way indicator species analysis). Vegetation noda developed to 3 levels. Eigenvalues and indicator species are shown at each division. For decoding of indicator species, see Appendix 1. For legend to zone codes see Fig. 2.



Frequency (%) of noda representation in zones

ND	0	14	19	0
NC	0	14	13	0
NB	0	13	14	0
NA	100	18	0	0
SA	0	14	19	0
SB	0	13	19	0
SC	0	14	9	100

Physical variables associated with noda

Dust[a]	0.35	0.74	0.03	0.01
Moisture[b]	0.02	0.14	0.18	0.15
pH	4.5	4.4	4.5	4.5
Soil Mass[c]	1.3	0.9	1.1	1.1

[a] g m^{-2} day^{-1}; [b] ml cm^{-3}; [c] g cm^{-3}

Figure 17. Road site 2, 1997. TWINSPAN dendrogram (Two-way indicator species analysis). Vegetation noda developed to 3 levels. Eigenvalues and indicator species are shown at each division. For decoding of indicator species, see Appendix 1. For legend to zone codes see Fig. 2.

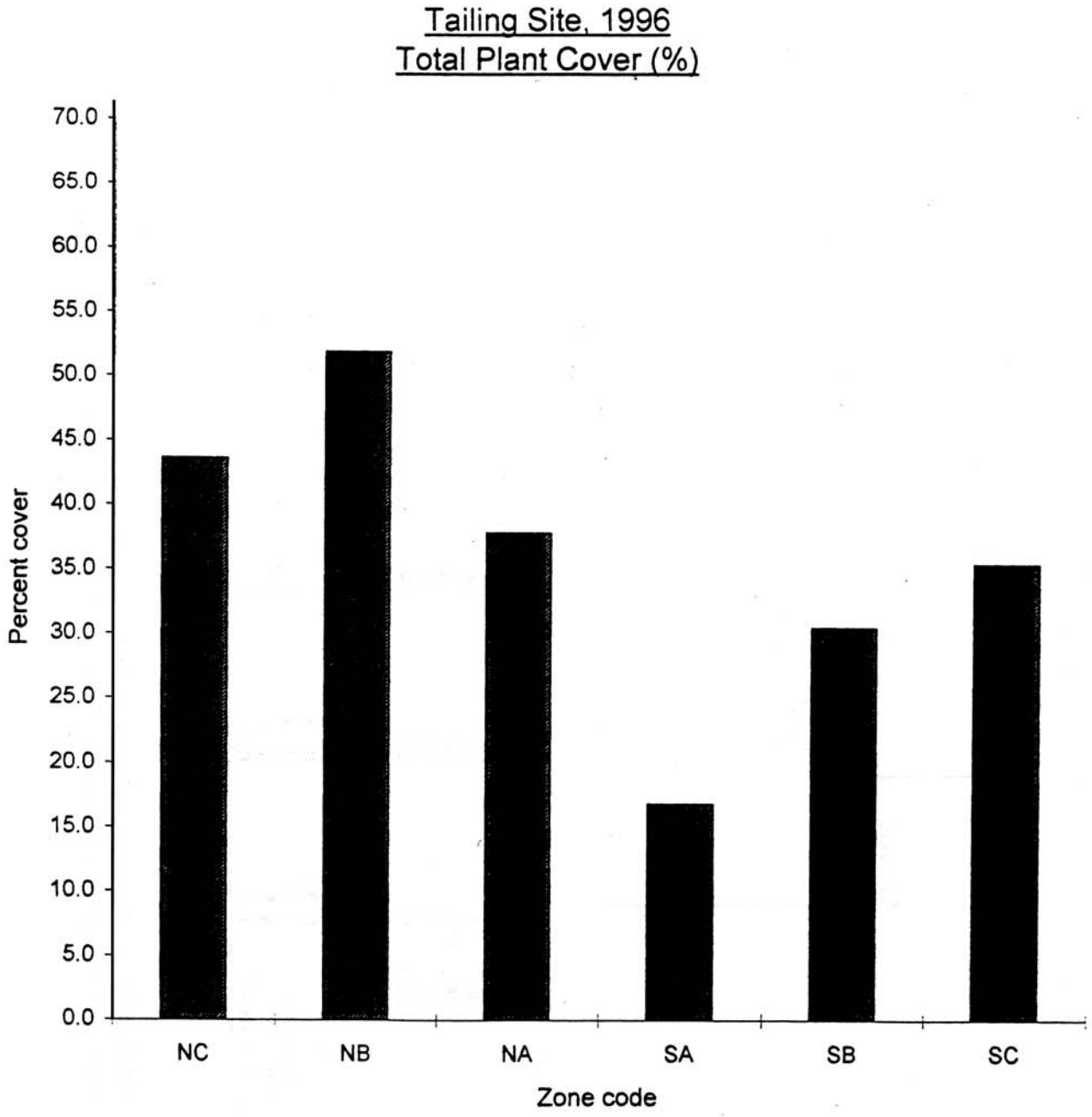


Figure 18. Tailings pond, 1996, total plant cover (%) in zones of a northern and southern zone transect (mean; n= 45). For exact values see Appendix 3.0. For legend to zones see Fig. 2.

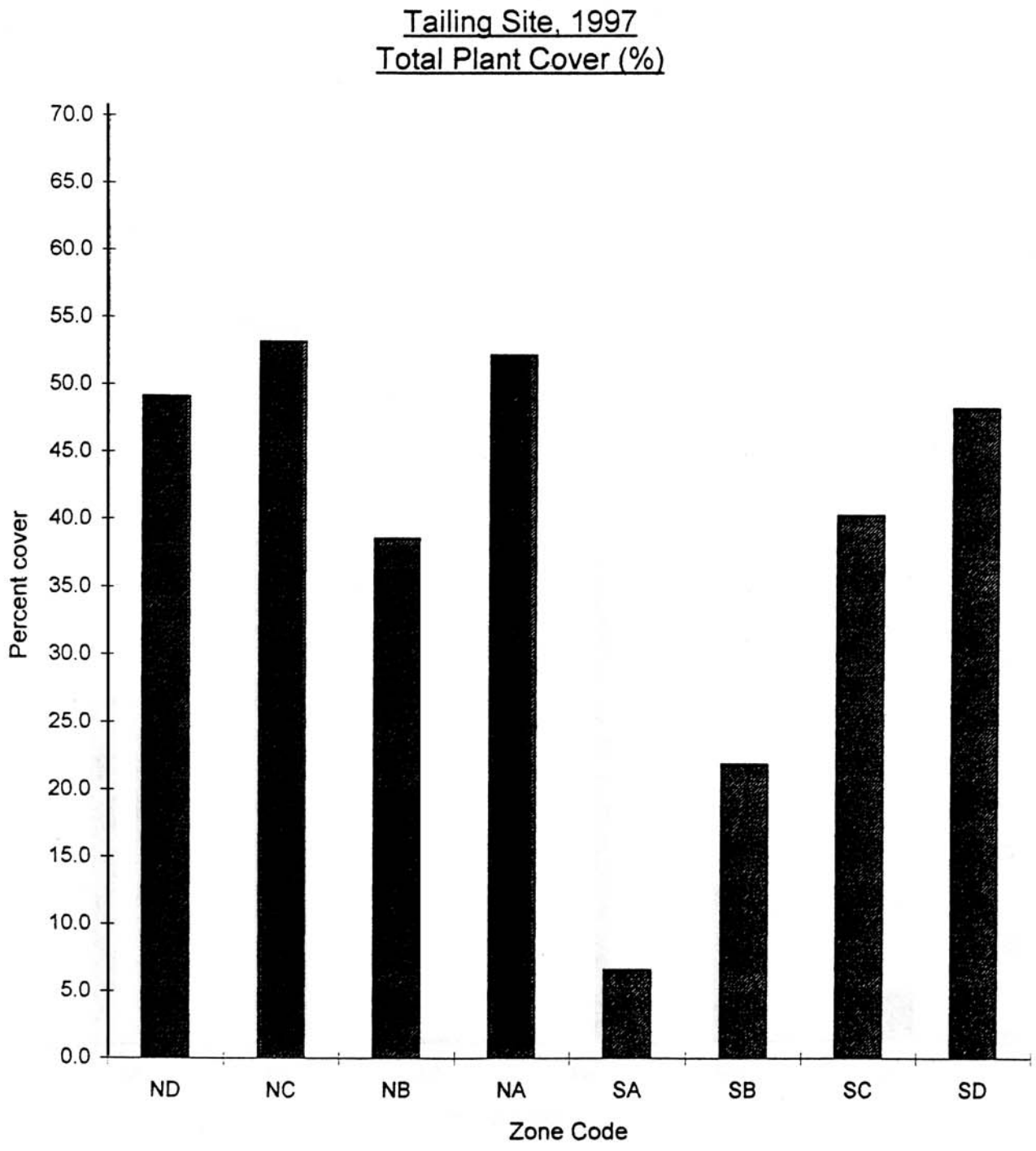


Figure 19. Tailings pond, 1997, total plant cover (%) in zones of a northern and southern zone transect (mean; n= 45). For exact values see Appendix 3.0. For legend to zones see Fig. 2.

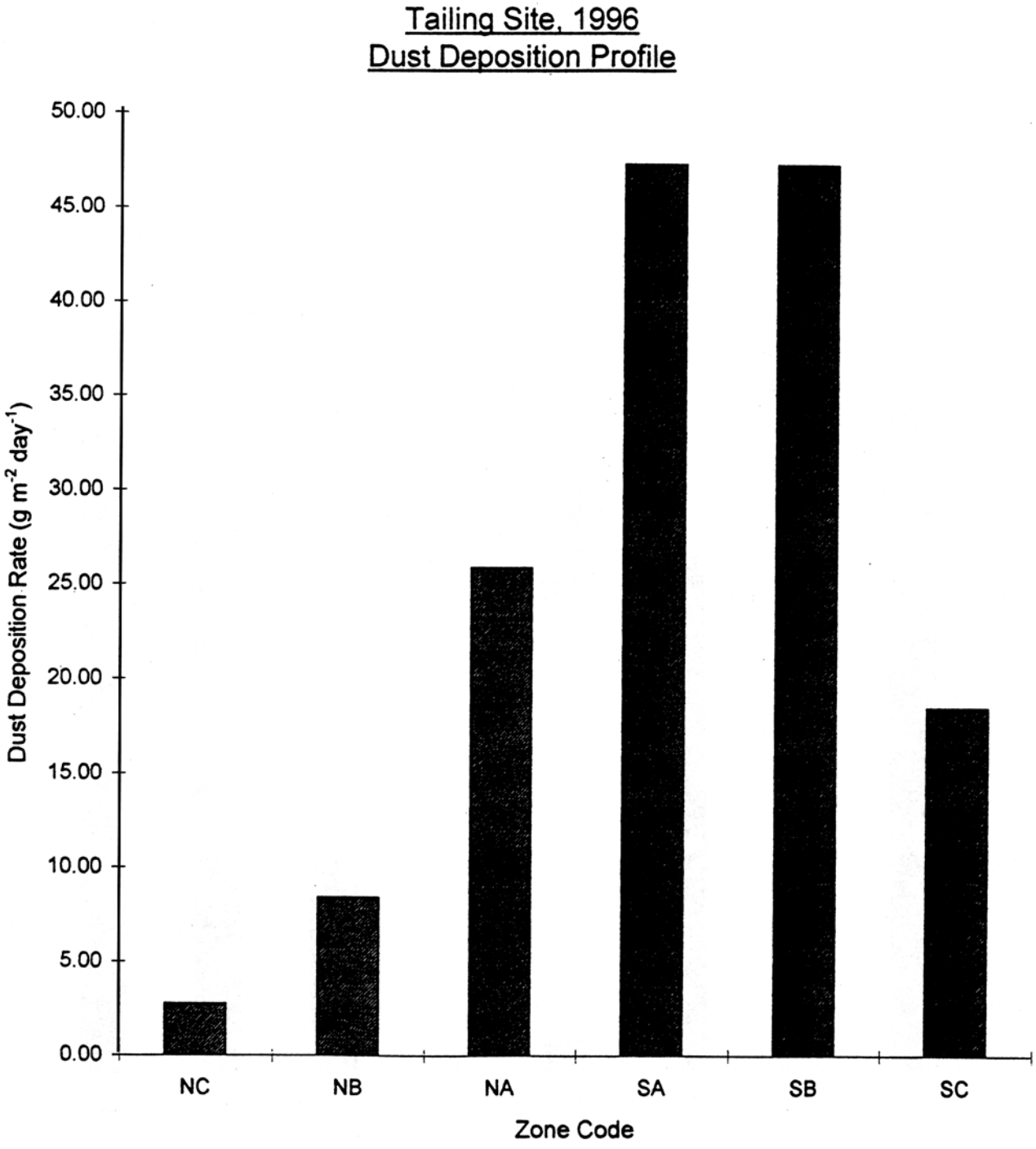


Figure 20. Tailings pond, 1996, dust deposition rates in zones of a northern and southern zone transect (mean; n= 9). For exact values see Appendix 3.0. For legend to zones see Fig. 2.

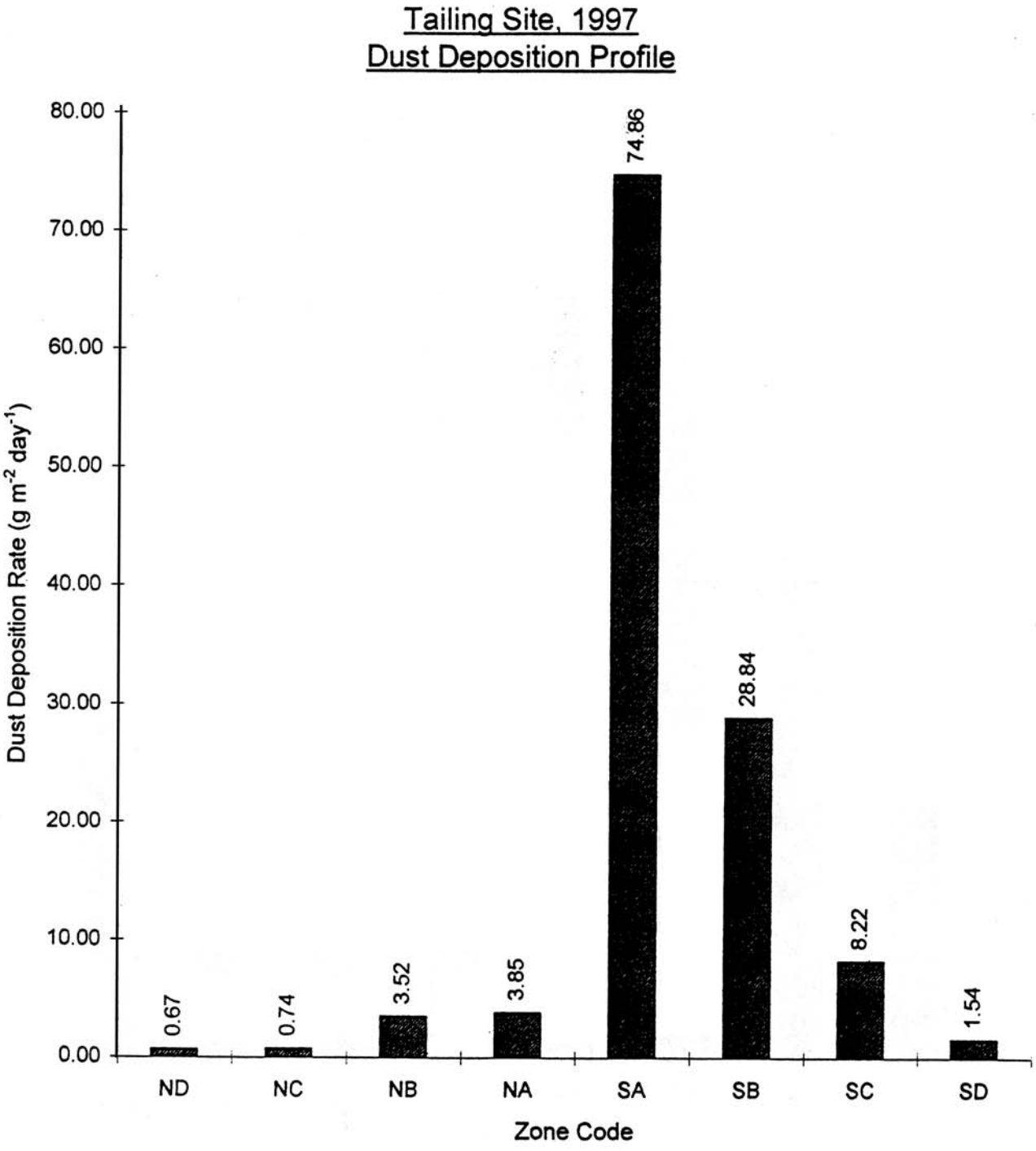


Figure 21. Tailings pond, 1997, dust deposition rates in zones of a northern and southern zone transect (mean; n= 27). For exact values see Appendix 3.0. For legend to zones see Fig. 2.

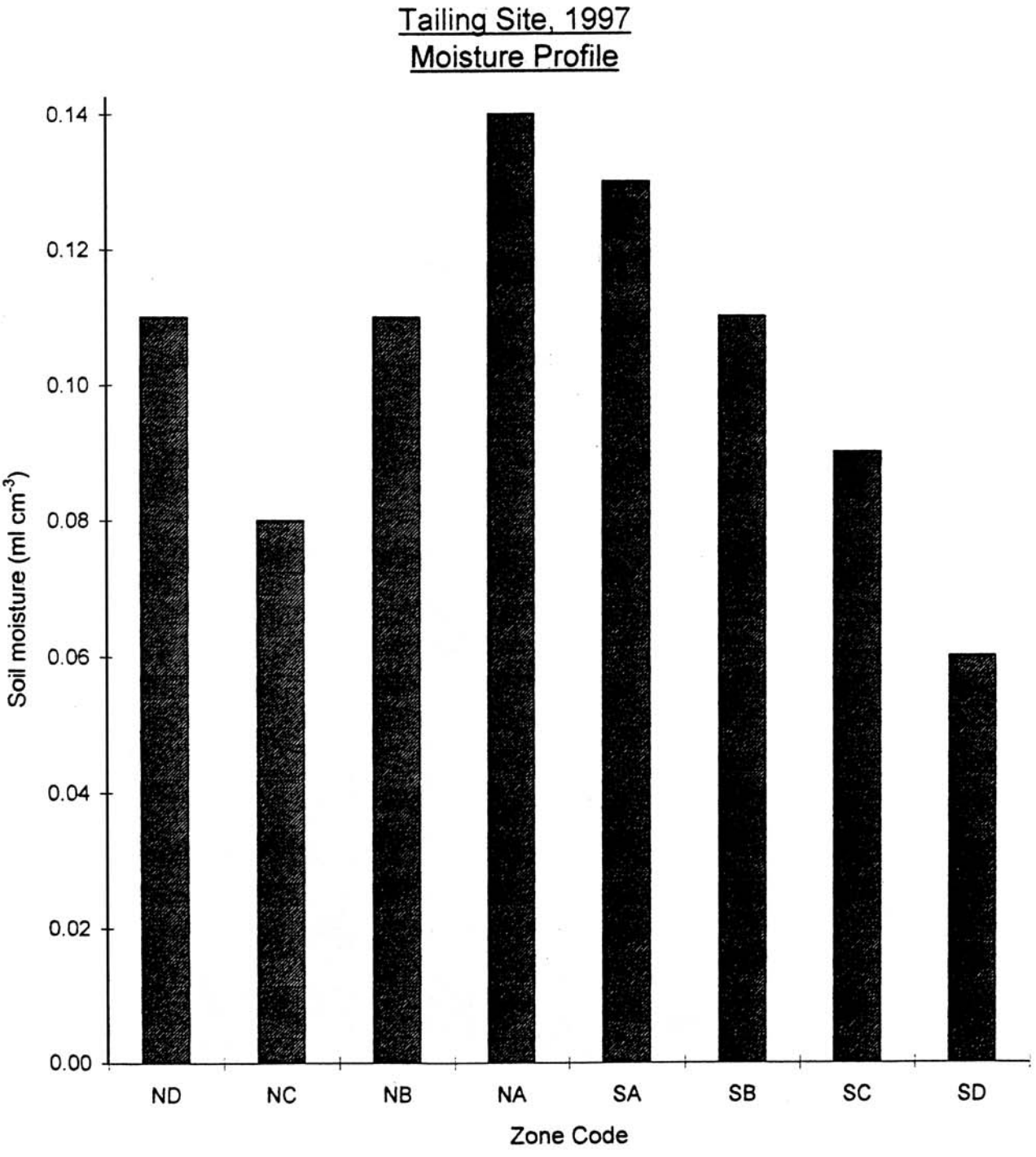


Figure 22. Tailings pond, 1997, soil moisture content per volume in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 3.0. For legend to zones see Fig. 2.

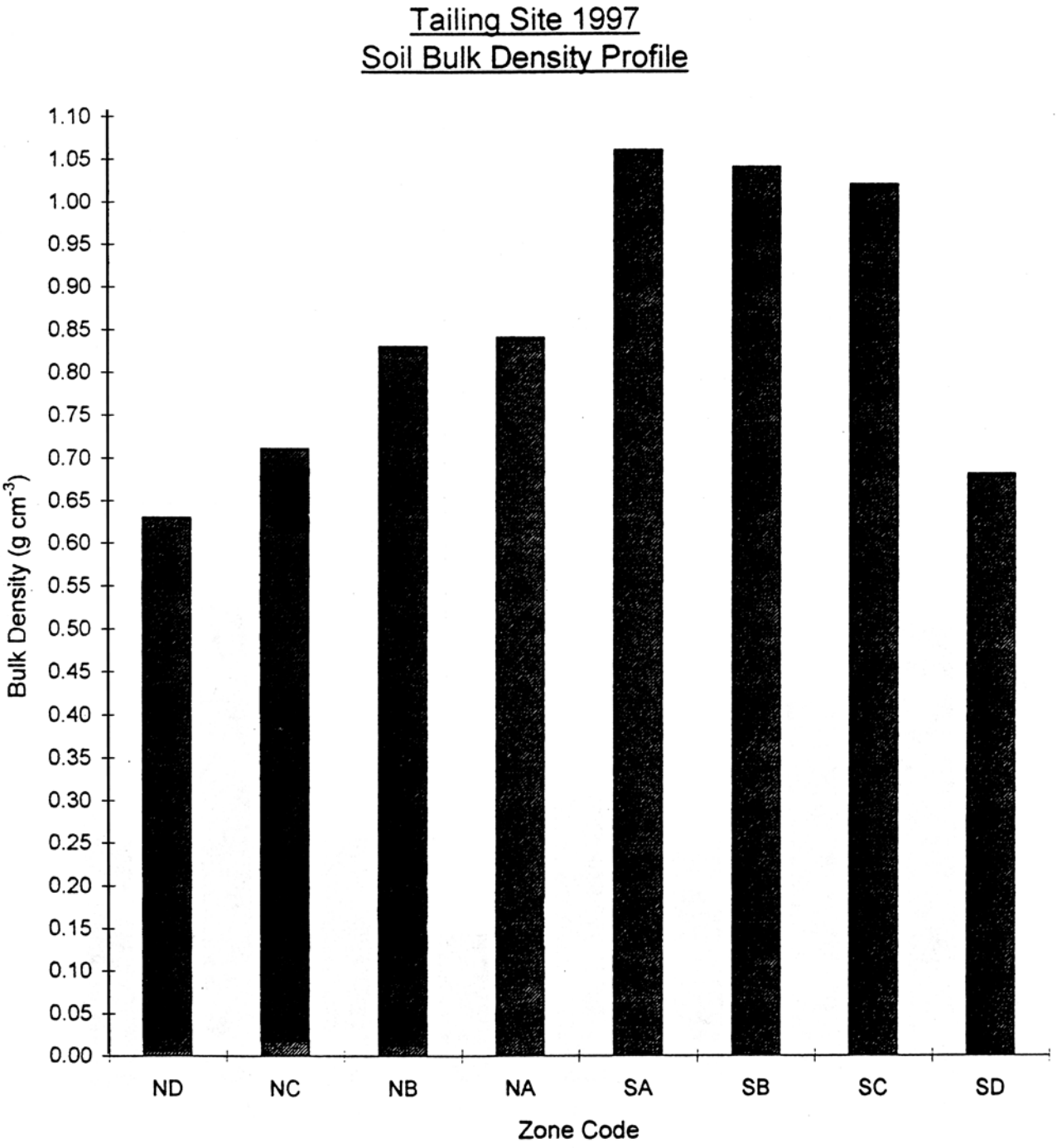


Figure 23. Tailings pond, 1997, soil mass (bulk density) in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 3.0. For legend to zones see Fig. 2.

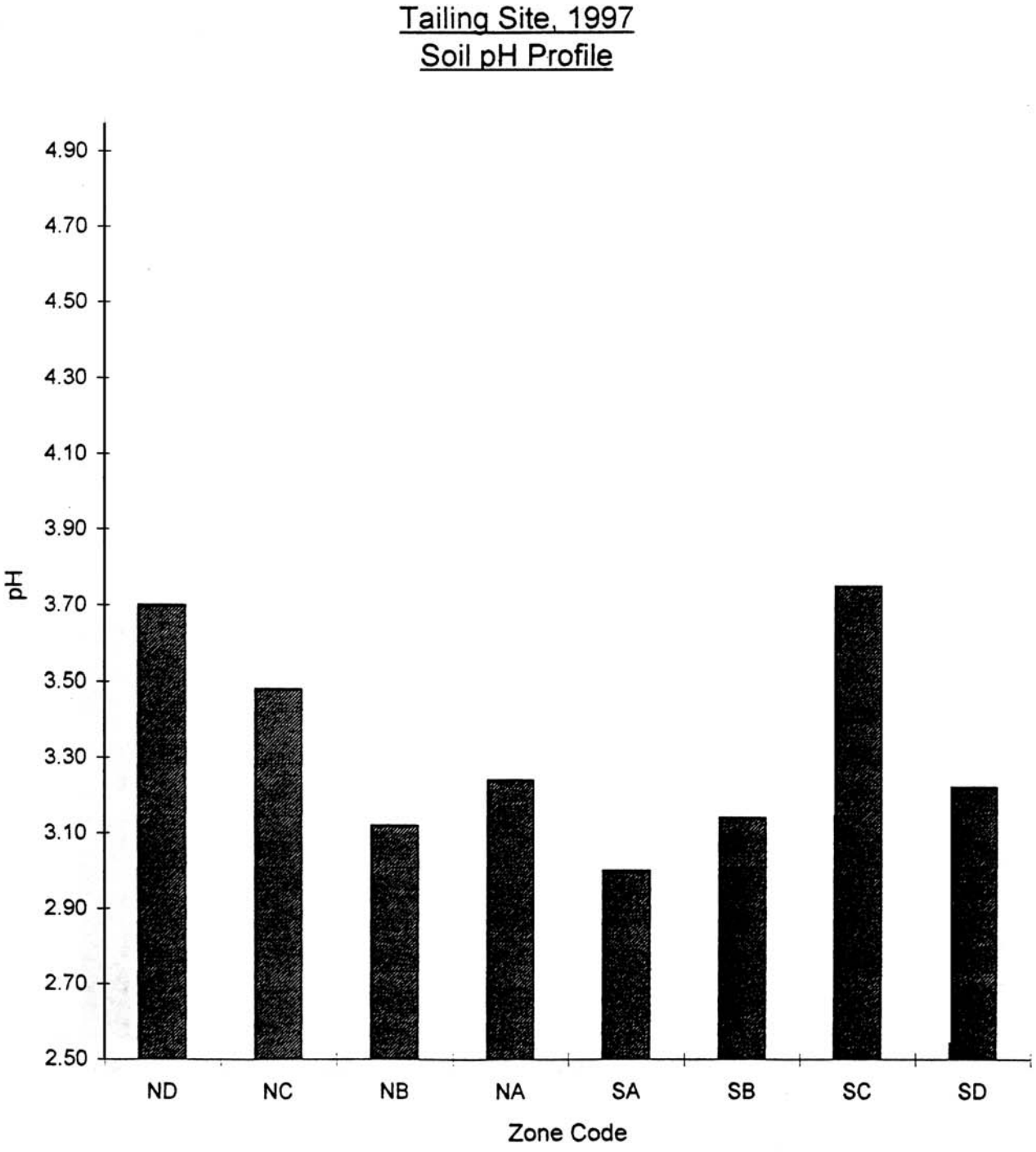
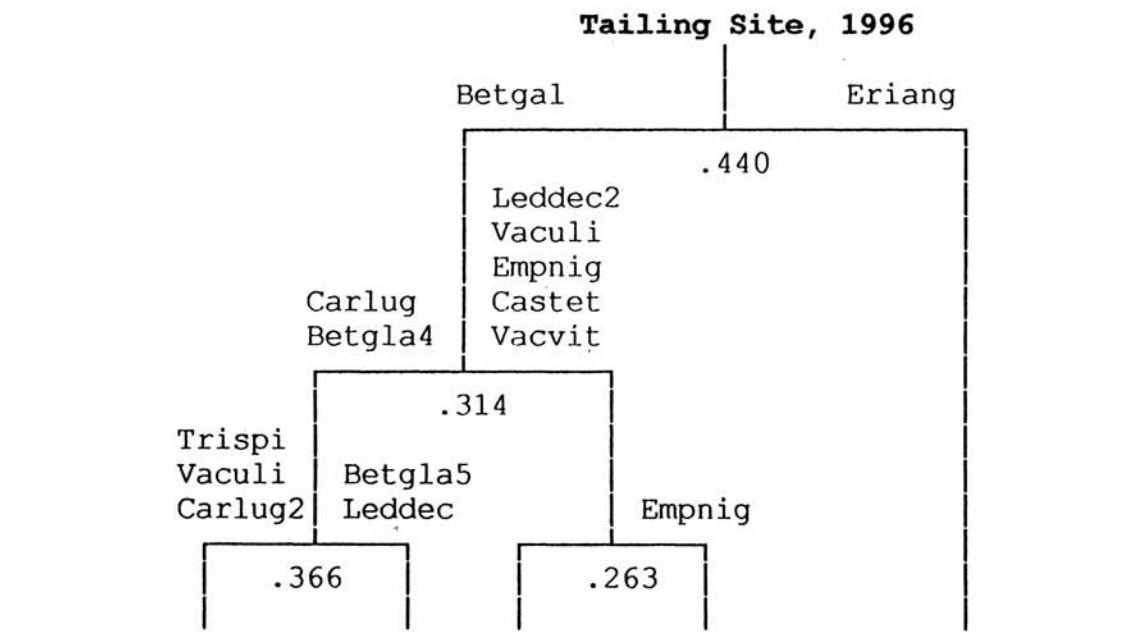


Figure 24. Tailings pond, 1997, soil pH in zones of a northern and southern zone transect (mean; n= 18). For exact values see Appendix 3.0. For legend to zones see Fig. 2.



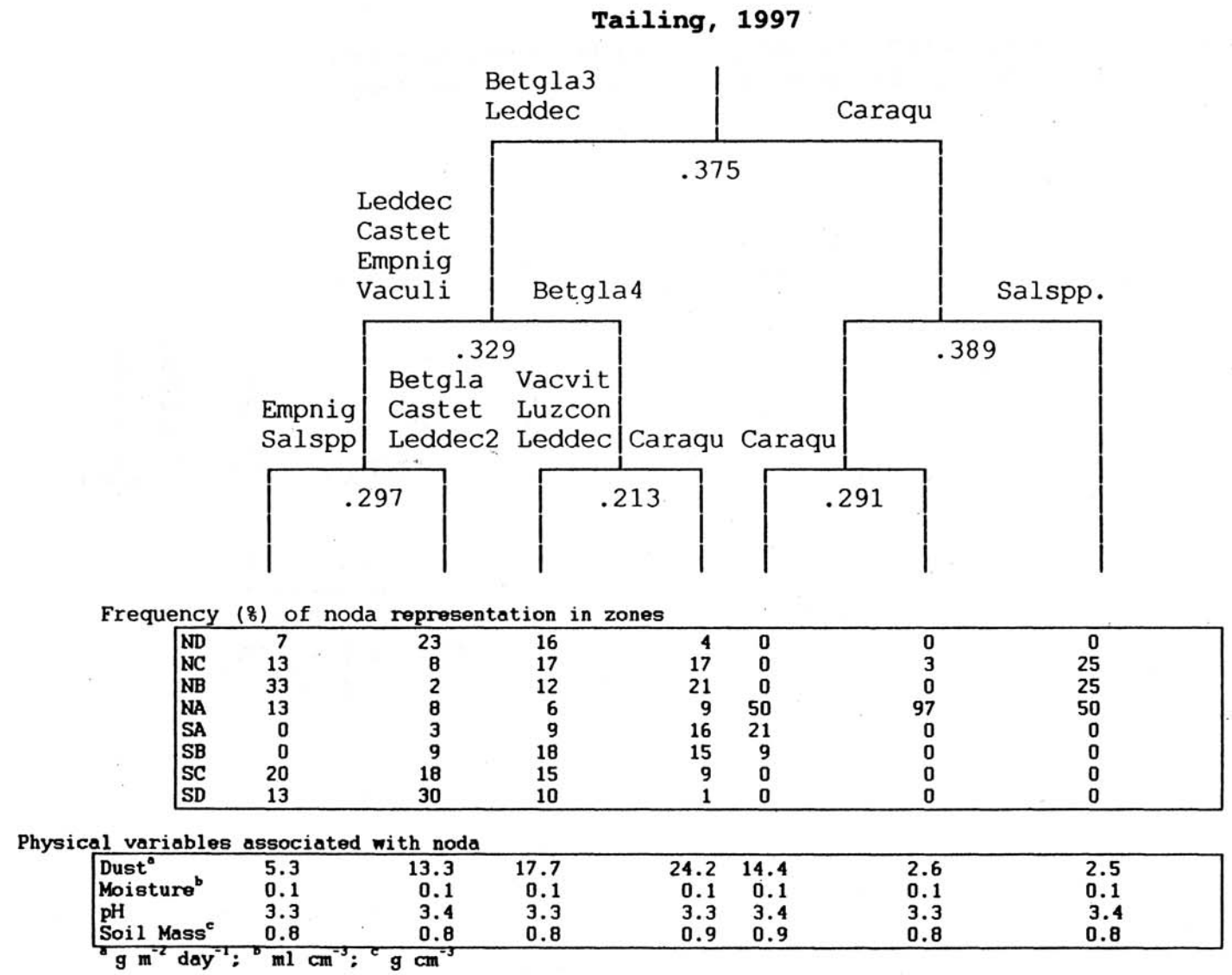
Frequency (%) of noda representation in zones

NC	0	8	36	10	0
NB	0	37	8	0	0
NA	18	36	3	6	0
SA	23	14	9	22	100
SB	59	3	15	29	0
SC	0	2	37	32	0

Mean dust deposition rate (g m^{-2} day^{-1})

32.5	20.8	20.8	33.9	56.6

Figure 25. Tailings pond, 1996. TWINSPAN dendrogram (Two-way indicator species analysis). Vegetation noda developed to 3 levels. Eigenvalues and indicator species are shown at each division. For decoding of indicator species, see Appendix 1. For legend to zone codes see Fig. 2.



Frequency (%) of noda representation in zones

ND	7	23	16	4	0	0	0
NC	13	8	17	17	0	3	25
NB	33	2	12	21	0	0	25
NA	13	8	6	9	50	97	50
SA	0	3	9	16	21	0	0
SB	0	9	18	15	9	0	0
SC	20	18	15	9	0	0	0
SD	13	30	10	1	0	0	0

Physical variables associated with noda

Dust[a]	5.3	13.3	17.7	24.2	14.4	2.6	2.5
Moisture[b]	0.1	0.1	0.1	0.1	0.1	0.1	0.1
pH	3.3	3.4	3.3	3.3	3.4	3.3	3.4
Soil Mass[c]	0.8	0.8	0.8	0.9	0.9	0.8	0.8

[a] $g\ m^{-2}\ day^{-1}$; [b] $ml\ cm^{-3}$; [c] $g\ cm^{-3}$

Figure 26. Tailings pond, 1997. TWINSPAN dendrogram (Two-way indicator species analysis). Vegetation noda developed to 3 levels. Eigenvalues and indicator species are shown at each division. For decoding of indicator species, see Appendix 1. For legend to zone codes see Fig. 2.