Create dummy variables

Variable Creation

	Label
SoilType__1	SoilType_Code =1.0
SoilType__2	SoilType_Code =2.0
SoilType__3	SoilType_Code =3.0
SoilType__4	SoilType_Code =4.0
SoilType__5	SoilType_Code =5.0

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	SoilType_Code =5.0, Ecosystem Age (years), Average Annual Rainfall (mm), SoilType_Code =4.0, SoilType_Code =2.0, SoilType_Code =3.0[b]	.	Enter

a. Dependent Variable: Biodiversity Index

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.149[a]	.022	.002	14.650

a. Predictors: (Constant), SoilType_Code=5.0, Ecosystem Age (years), Average Annual Rainfall (mm), SoilType_Code=4.0, SoilType_Code=2.0, SoilType_Code=3.0

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1431.226	6	238.538	1.111	.356[b]
	Residual	62884.521	293	214.623		
	Total	64315.747	299			

a. Dependent Variable: Biodiversity Index

b. Predictors: (Constant), SoilType_Code=5.0, Ecosystem Age (years), Average Annual Rainfall (mm), SoilType_Code=4.0, SoilType_Code=2.0, SoilType_Code=3.0

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	79.239	2.729		29.039	<.001
	Average Annual Rainfall (mm)	-.001	.001	-.102	-1.767	.078
	Ecosystem Age (years)	1.608E-5	.000	.003	.054	.957
	SoilType_Code=2.0	-1.915	2.791	-.049	-.686	.493
	SoilType_Code=3.0	2.813	2.643	.078	1.064	.288
	SoilType_Code=4.0	-.945	2.785	-.024	-.339	.735
	SoilType_Code=5.0	-.408	2.526	-.012	-.162	.872

a. Dependent Variable: Biodiversity Index

Oneway

ANOVA

Biodiversity Index

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	197.932	5	39.586	.182	.969
Within Groups	64117.815	294	218.088		
Total	64315.747	299			

ANOVA Effect Sizes[a,b]

			95% Confidence Interval	
		Point Estimate	Lower	Upper
Biodiversity Index	Eta-squared	.003	.000	.002
	Epsilon-squared	-.014	-.017	-.015
	Omega-squared Fixed-effect	-.014	-.017	-.015
	Omega-squared Random-effect	-.003	-.003	-.003

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Biodiversity Index

Tukey HSD

(I) Ecosystem Type Recoded	(J) Ecosystem Type Recoded	Mean Difference (I-J)	Std. Error	Sig.
1.00	2.00	.917	2.905	1.000
	3.00	1.630	2.889	.993
	4.00	.018	3.182	1.000
	5.00	1.691	2.889	.992
	6.00	2.050	2.712	.975
2.00	1.00	-.917	2.905	1.000
	3.00	.713	2.999	1.000
	4.00	-.899	3.282	1.000
	5.00	.775	2.999	1.000
	6.00	1.133	2.829	.999
3.00	1.00	-1.630	2.889	.993
	2.00	-.713	2.999	1.000
	4.00	-1.612	3.268	.996
	5.00	.061	2.984	1.000
	6.00	.420	2.813	1.000
4.00	1.00	-.018	3.182	1.000
	2.00	.899	3.282	1.000
	3.00	1.612	3.268	.996
	5.00	1.673	3.268	.996
	6.00	2.032	3.113	.987
5.00	1.00	-1.691	2.889	.992
	2.00	-.775	2.999	1.000
	3.00	-.061	2.984	1.000
	4.00	-1.673	3.268	.996
	6.00	.358	2.813	1.000
6.00	1.00	-2.050	2.712	.975
	2.00	-1.133	2.829	.999
	3.00	-.420	2.813	1.000
	4.00	-2.032	3.113	.987
	5.00	-.358	2.813	1.000

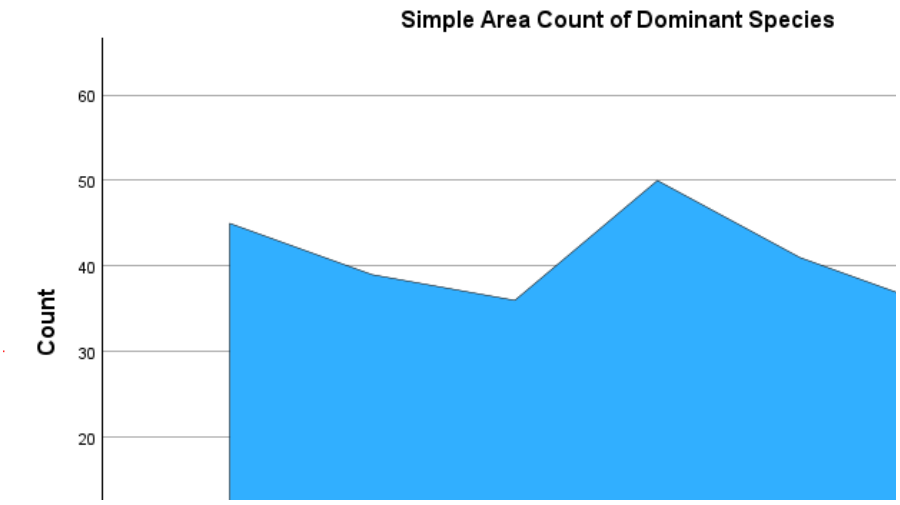
Multiple Comparisons

Dependent Variable: Biodiversity Index

Tukey HSD

(I) Ecosystem Type Recoded	(J) Ecosystem Type Recoded	95% Confidence Interval	
		Lower Bound	Upper Bound
1.00	2.00	-7.42	9.25
	3.00	-6.66	9.92
	4.00	-9.11	9.15
	5.00	-6.60	9.98
	6.00	-5.73	9.83
2.00	1.00	-9.25	7.42
	3.00	-7.89	9.32
	4.00	-10.31	8.52
	5.00	-7.83	9.38
	6.00	-6.98	9.25
3.00	1.00	-9.92	6.66
	2.00	-9.32	7.89
	4.00	-10.99	7.76
	5.00	-8.50	8.62
	6.00	-7.65	8.49
4.00	1.00	-9.15	9.11
	2.00	-8.52	10.31
	3.00	-7.76	10.99
	5.00	-7.70	11.05
	6.00	-6.90	10.96
5.00	1.00	-9.98	6.60
	2.00	-9.38	7.83
	3.00	-8.62	8.50
	4.00	-11.05	7.70
	6.00	-7.71	8.43
6.00	1.00	-9.83	5.73
	2.00	-9.25	6.98
	3.00	-8.49	7.65
	4.00	-10.96	6.90
	5.00	-8.43	7.71

GGraph



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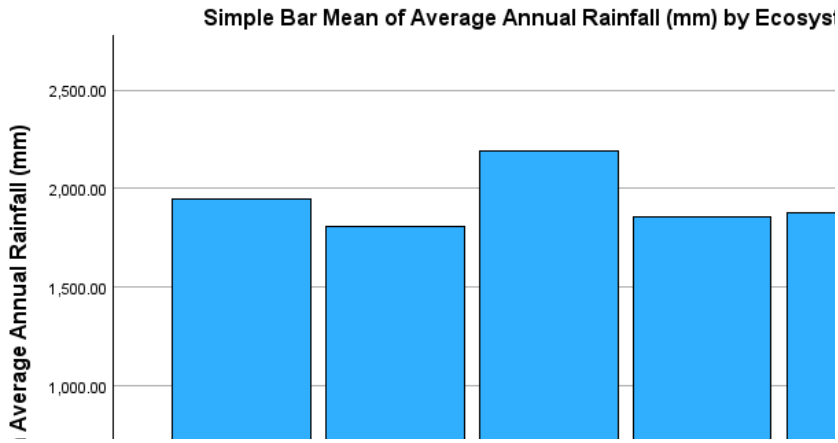

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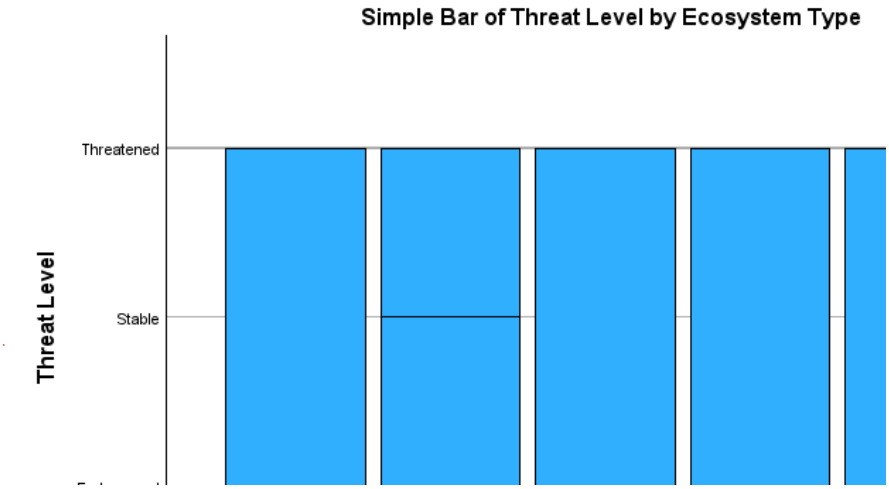


Homogeneous Subsets

Biodiversity Index

Tukey HSD[a,b]

Ecosystem Type Recoded	N	Subset for alpha = 0.05 1
6.00	63	75.83
5.00	49	76.18
3.00	49	76.24
2.00	48	76.96
4.00	35	77.86
1.00	56	77.88
Sig.		.984

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 48.406.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
Average Annual Rainfall (mm)	1921.2304	1129.28508	300
Ecosystem Age (years)	4668.54	2841.232	300
Biodiversity Index	76.75	14.666	300
Carbon Sequestration Potential (tonnes/year)	5015.0480	2820.38650	300
Size of Area surveyed (sq km)	270.1492	137.60230	300
Sampling Effort (hours)	56.09	26.958	300

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.561
Bartlett's Test of Sphericity	Approx. Chi-Square	13.115
	df	15
	Sig.	.593

Communalities

	Initial	Extraction
Average Annual Rainfall (mm)	1.000	.432
Ecosystem Age (years)	1.000	.383
Biodiversity Index	1.000	.312
Carbon Sequestration Potential (tonnes/year)	1.000	.474
Size of Area surveyed (sq km)	1.000	.360
Sampling Effort (hours)	1.000	.318

Extraction Method: Principal Component Analysis.

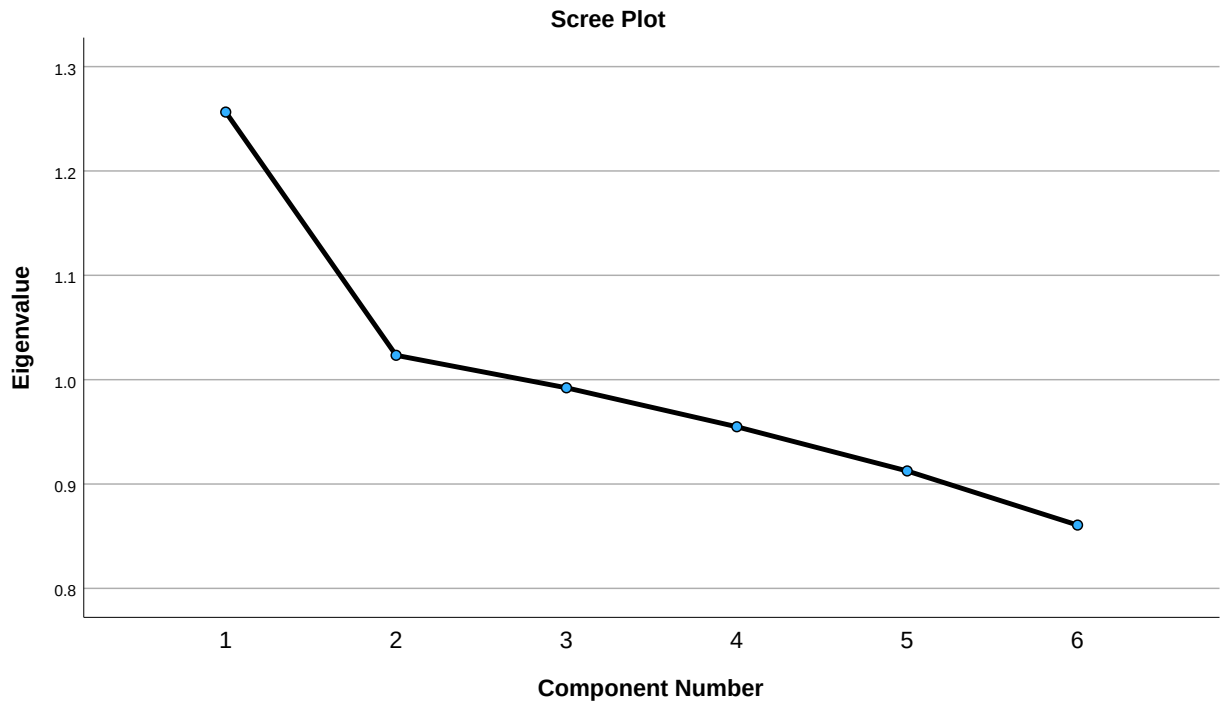
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.256	20.940	20.940	1.256	20.940	20.940
2	1.023	17.056	37.996	1.023	17.056	37.996
3	.992	16.536	54.533			
4	.955	15.914	70.447			
5	.913	15.209	85.656			
6	.861	14.344	100.000			

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	1.252	20.874	20.874
2	1.027	17.122	37.996
3			
4			
5			
6			

Extraction Method: Principal Component Analysis.



Component Matrix[a]

	Component	
	1	2
Average Annual Rainfall (mm)	-.656	.044
Ecosystem Age (years)	.030	-.619
Biodiversity Index	.541	.142
Carbon Sequestration Potential (tonnes/year)	.452	.519
Size of Area surveyed (sq km)	-.262	.540
Sampling Effort (hours)	.510	-.240

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Rotated Component Matrix[a]

	Component	
	1	2
Average Annual Rainfall (mm)	-.644	.129
Ecosystem Age (years)	-.051	-.617
Biodiversity Index	.555	.070
Carbon Sequestration Potential (tonnes/year)	.516	.455
Size of Area surveyed (sq km)	-.189	.570
Sampling Effort (hours)	.474	-.305

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 3 iterations.

Component Transformation Matrix

Component	1	2
1	.991	-.131
2	.131	.991

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.