**MODELS FOR ASF AND HAB TYPES WITH ALL VARIABLES:**



**ASF ALL:  
MODEL: \*\*, adjusted R2 = 0.05**

**AXES: (CAP1\*\*)**

**VARIABLES: Small Stem Count (\*), Hab Type (\*\*\*), Basal Area (.)**

**AXES:**

Permutation test for capscale under reduced model

Forward tests for axes

Permutation: free

Number of permutations: 999

Model: capscale(formula = spe ~ EdgeDist + Basal + Canopy + LeafLayer + StemSmall + StemLarge + Debris + HerbCover + Hab, distance = "bray", add = TRUE)

Df SumOfSqs F Pr(>F)

CAP1 1 3.167 4.2169 0.005 \*\*

CAP2 1 1.879 2.5014 0.188

CAP3 1 0.961 1.2793 0.993

CAP4 1 0.804 1.0703 1.000

CAP5 1 0.700 0.9317 1.000

CAP6 1 0.618 0.8223 1.000

CAP7 1 0.538 0.7166 1.000

CAP8 1 0.428 0.5695 1.000

CAP9 1 0.397 0.5289 1.000

CAP10 1 0.360 0.4796 0.998

Residual 46 34.547

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

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**VARIABLES:**

Permutation test for capscale under reduced model

Marginal effects of terms

Permutation: free

Number of permutations: 999

Model: capscale(formula = spe ~ EdgeDist + Basal + Canopy + LeafLayer + StemSmall + StemLarge + Debris + HerbCover + Hab, distance = "bray", add = TRUE)

Df SumOfSqs F Pr(>F)

EdgeDist 1 0.733 0.9756 0.480

Basal 1 1.086 1.4462 0.067 .

Canopy 1 0.548 0.7295 0.880

LeafLayer 1 0.721 0.9602 0.485

StemSmall 1 1.271 1.6920 0.021 \*

StemLarge 1 0.606 0.8069 0.735

Debris 1 0.931 1.2399 0.141

HerbCover 1 0.744 0.9904 0.435

Hab 2 3.055 2.0340 0.001 \*\*\*

Residual 46 34.547

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

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**MODEL: (nope)**

**AXES: (NOPE)**

**VARIABLES: (NOPE)**



**MIXED FOREST ALL**

**MODEL: (NOPE)**

**AXES: (NOPE)**

**VARIABLES: Small Stem (\*), Debris (.), Basal Area (.)**

**VARIABLES:**

Permutation test for capscale under reduced model

Marginal effects of terms

Permutation: free

Number of permutations: 999

Model: capscale(formula = SpecM ~ EdgeDistM + LeafLayerM + CanopyM + BasalM + StemSmallM + StemLargeM + HerbCoverM + DebrisM, distance = "bray", add = TRUE)

Df SumOfSqs F Pr(>F)

EdgeDistM 1 0.7148 1.2694 0.196

LeafLayerM 1 0.4743 0.8423 0.637

CanopyM 1 0.5888 1.0456 0.370

BasalM 1 0.9192 1.6324 0.055 .

StemSmallM 1 1.2384 2.1991 0.012 \*

StemLargeM 1 0.7647 1.3579 0.138

HerbCoverM 1 0.4805 0.8533 0.595

DebrisM 1 0.8397 1.4911 0.080 .

Residual 21 11.8259

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

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**ONLY SIGNIFICANT VARIABLES**



**Model: ASF only sig variables (\*\*\*)**

**AXES: (CAP1\*\*\*, CAP2\*)**

**VARIABLE: Hab (\*\*\*), Small Stem (\*)**

**AXES:**

> anova(db.rda, by="axis", step=1000)

Permutation test for capscale under reduced model

Forward tests for axes

Permutation: free

Number of permutations: 999

Model: capscale(formula = spe ~ Basal + StemSmall + Hab, distance = "bray", add = TRUE)

Df SumOfSqs F Pr(>F)

CAP1 1 2.838 3.7858 0.001 \*\*\*

CAP2 1 1.532 2.0441 0.021 \*

CAP3 1 0.582 0.7765 0.983

CAP4 1 0.463 0.6176 0.989

Residual 52 38.982

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

**VARIABLES:**

> anova(db.rda, by="margin", step=1000)

Permutation test for capscale under reduced model

Marginal effects of terms

Permutation: free

Number of permutations: 999

Model: capscale(formula = spe ~ Basal + StemSmall + Hab, distance = "bray", add = TRUE)

Df SumOfSqs F Pr(>F)

Basal 1 0.963 1.2852 0.135

StemSmall 1 1.094 1.4593 0.052 .

Hab 2 3.531 2.3549 0.001 \*\*\*

Residual 52 38.982

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1



**ASF sig variables with interaction**

**MODEL: (\*\*\*)**

**AXES: (CAP1\*\*\*, CAP2\*)**

**VARIABLES:**

**AXES:**

Permutation test for capscale under reduced model

Forward tests for axes

Permutation: free

Number of permutations: 999

Model: capscale(formula = spe ~ Basal + Hab \* StemSmall, distance = "bray", add = TRUE)

Df SumOfSqs F Pr(>F)

CAP1 1 3.029 4.0378 0.001 \*\*\*

CAP2 1 1.740 2.3188 0.029 \*

CAP3 1 0.628 0.8372 1.000

CAP4 1 0.559 0.7453 1.000

CAP5 1 0.495 0.6603 1.000

CAP6 1 0.434 0.5791 0.993

Residual 50 37.511

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

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