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[1] "-----"
[1] "      THE EFFECT OF SEX, AGE & JAW LENGTH      "
[1] "      model selection and estimated effects      "
[1] "-----"
[1] ""
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[1] "-----"
[1] "      MODEL SELECTION: random-effects          "
[1] "-----"
               AICc deltaAICc
mod1          -261.9836   2.044887
mod1.lme1     -264.0285   0.000000
[1] ""
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[1] "-----"
[1] "      MODEL SELECTION: weights (varFunct)      "
[1] "-----"

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Model selection based on AICc:

	K	AICc	Delta_AICc	AICcWt	Cum.Wt	Res.LL
mod1.varPower	7	-266.3222	0.0000	0.6728	0.6728	140.3104
mod1	6	-264.0285	2.2937	0.2137	0.8865	138.1260
mod1.varExp	7	-262.7630	3.5592	0.1135	1.0000	138.5308
mod1.varFixed	6	-115.8561	150.4661	0.0000	1.0000	64.0397

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[1] "      MODEL SELECTION: fixed-effects          "
[1] "-----"

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Model selection based on AICc:

	K	AICc	Delta_AICc	AICcWt	Cum.Wt	LL
mod1	7	-302.8621	0.0000	0.6047	0.6047	158.5804
mod2	6	-302.0119	0.8503	0.3953	1.0000	157.1176
mod3	5	-273.1679	29.6942	0.0000	1.0000	141.6635

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[1] "      MODEL SUMMARY                          "
[1] "-----"

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Linear mixed-effects model fit by REML

Data: dataAnaly

	AIC	BIC	logLik
	-277.4233	-253.7822	144.7116

Random effects:

Formula: ~1 | hunt_unit

(Intercept) Residual

StdDev: 0.03651672 0.1378228

Variance function:

Structure: Power of variance covariate

Formula: ~leg_length.sc

Parameter estimates:

power

0.07429627

Fixed effects: weight ~ leg_length.sc + sex

	Value	Std.Error	DF	t-value	p-value
(Intercept)	3.410770	0.023084514	378	147.75142	0
leg_length.sc	0.015637	0.000581837	378	26.87515	0
sexm	-0.133125	0.022873275	378	-5.82011	0

Correlation:

(Intr) lg_ln.

leg_length.sc -0.048

sexm -0.168 0.221

Standardized Within-Group Residuals:

Min	Q1	Med	Q3	Max
-3.38554033	-0.70494435	-0.04051576	0.62557840	3.12207250

Number of Observations: 383

Number of Groups: 3

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[1] " 95% CI "

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Approximate 95% confidence intervals

Fixed effects:

	lower	est.	upper
(Intercept)	3.36537941	3.41076956	3.45615970
leg_length.sc	0.01449291	0.01563695	0.01678099
sexm	-0.17809978	-0.13312498	-0.08815018

attr("label")

[1] "Fixed effects:"

Random Effects:

Level: hunt_unit

	lower	est.	upper
sd((Intercept))	0.01112384	0.03651672	0.119875

Variance function:

	lower	est.	upper
power	0.001494951	0.07429627	0.1470976

attr("label")

[1] "Variance function:"

Within-group standard error:

	lower	est.	upper
	0.1171344	0.1378228	0.1621653

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[1] "      R-SQUARE                                "
[1] "      cor between observed and predicted values "
[1] "-----"
[1] 0.7345227
[1] ""
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[1] "-----"
[1] "      REGULAR LINEAR REGRESSION (SEX AND AREA) "
[1] "      lmList output                            "
[1] "-----"
[1] ""
[1] "      -----"
[1] "      MALES                                    "
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Call:

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Model: weight ~ leg_length.sc | hunt_unit
Data: tmp

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Coefficients:

(Intercept)

	Estimate	Std. Error	t value	Pr(> t)
Reindalen	3.182045	0.05006500	63.55826	7.438586e-59
Colesdalen	3.299062	0.02986193	110.47717	7.660478e-74
Sassen	3.360879	0.03471577	96.81131	2.993574e-70

leg_length.sc

	Estimate	Std. Error	t value	Pr(> t)
Reindalen	0.01442938	0.002287762	6.307206	3.166932e-08
Colesdalen	0.01541820	0.001197111	12.879509	2.626789e-19
Sassen	0.01869974	0.001221781	15.305318	6.702686e-23

Residual standard error: 0.1603026 on 63 degrees of freedom

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[1] "      FEMALES                                "
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Call:

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Model: weight ~ leg_length.sc | hunt_unit
Data: tmp

```

Coefficients:

(Intercept)

	Estimate	Std. Error	t value	Pr(> t)
Reindalen	3.363190	0.02173234	154.7551	4.281331e-294
Colesdalen	3.420411	0.01599014	213.9075	0.000000e+00
Sassen	3.422068	0.01330038	257.2911	0.000000e+00

leg_length.sc

	Estimate	Std. Error	t value	Pr(> t)
Reindalen	0.01680160	0.0017729551	9.476606	7.298442e-19
Colesdalen	0.01446612	0.0013750834	10.520175	2.572200e-22
Sassen	0.01480640	0.0009672502	15.307724	9.962339e-40

Residual standard error: 0.1600631 on 308 degrees of freedom