Descriptive Statistics for Bumblebee Bat Weights

The MEANS Procedure

Analysis Variable : weight

N	Mean	Std Dev	Std Error	t Value	Pr > |t|
15	1.6466667	0.2531704	0.0653683	25.19	<.0001

Normality Analysis of Bumblebee Bat Weights

The UNIVARIATE Procedure
Variable: weight

Moments

N	15	**Sum Weights**	15
Mean	1.64666667	**Sum Observations**	24.7
Std Deviation	0.25317037	**Variance**	0.06409524
Skewness	1.09630411	**Kurtosis**	2.72573796
Uncorrected SS	41.57	**Corrected SS**	0.89733333
Coeff Variation	15.374719	**Std Error Mean**	0.06536831

Basic Statistical Measures

Location		Variability	
Mean	1.646667	**Std Deviation**	0.25317
Median	1.600000	**Variance**	0.06410
Mode	1.600000	**Range**	1.10000
		Interquartile Range	0.20000

Tests for Location: Mu0=0

Test		Statistic		p Value
Student's t	**t**	25.1906	**Pr > |t|**	<.0001
Sign	**M**	7.5	**Pr >= |M|**	<.0001
Signed Rank	**S**	60	**Pr >= |S|**	<.0001

Tests for Normality

Test		Statistic		p Value
Shapiro-Wilk	**W**	0.884372	**Pr < W**	0.0552
Kolmogorov-Smirnov	**D**	0.239789	**Pr > D**	0.0205
Cramer-von Mises	**W-Sq**	0.17198	**Pr > W-Sq**	0.0101

Tests for Normality

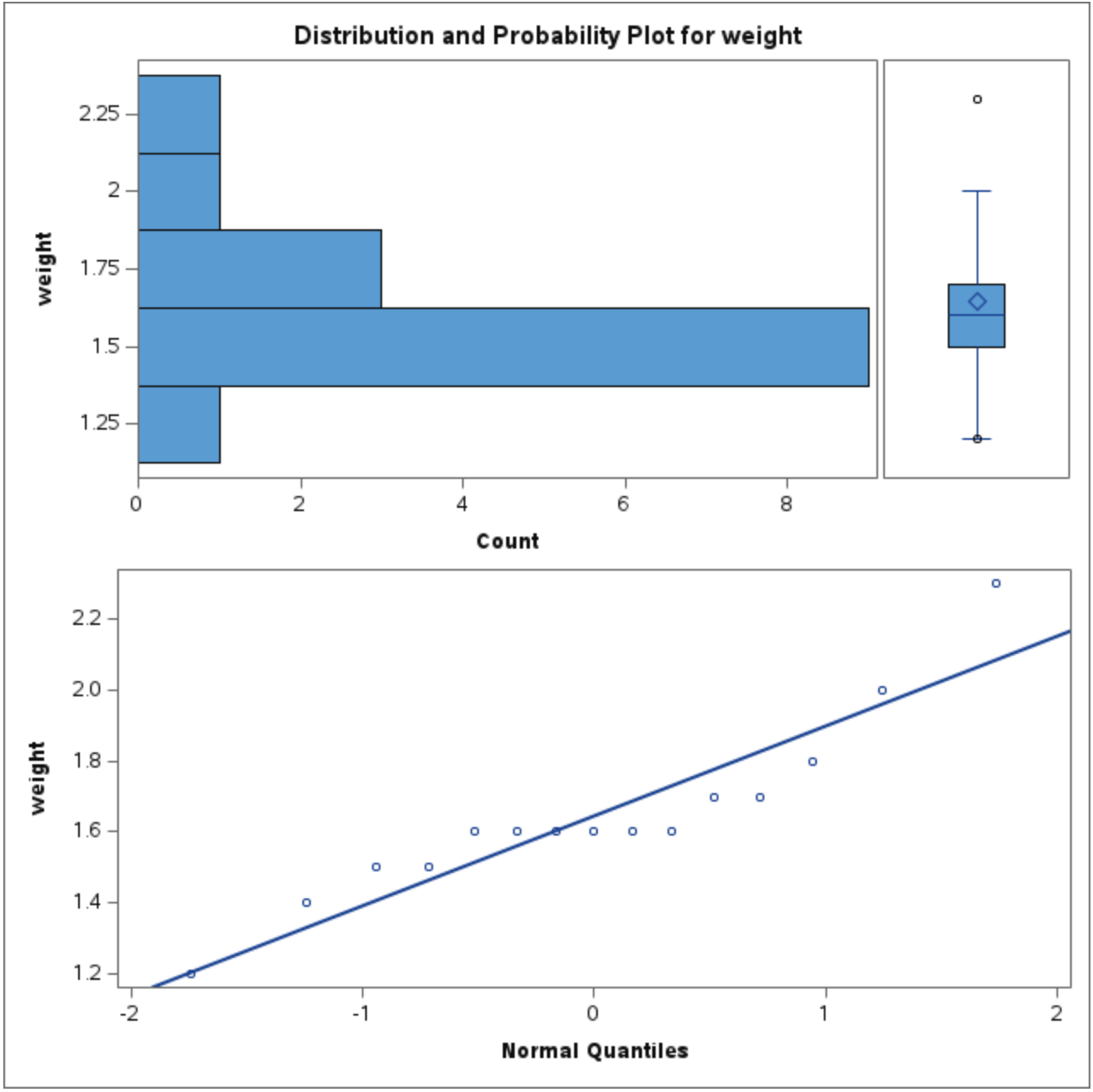
Test		Statistic		p Value
Anderson-Darling	**A-Sq**	0.875499	**Pr > A-Sq**	0.0199

Quantiles (Definition 5)

Level	Quantile
100% Max	2.3
99%	2.3
95%	2.3
90%	2.0
75% Q3	1.7
50% Median	1.6
25% Q1	1.5
10%	1.4
5%	1.2
1%	1.2
0% Min	1.2

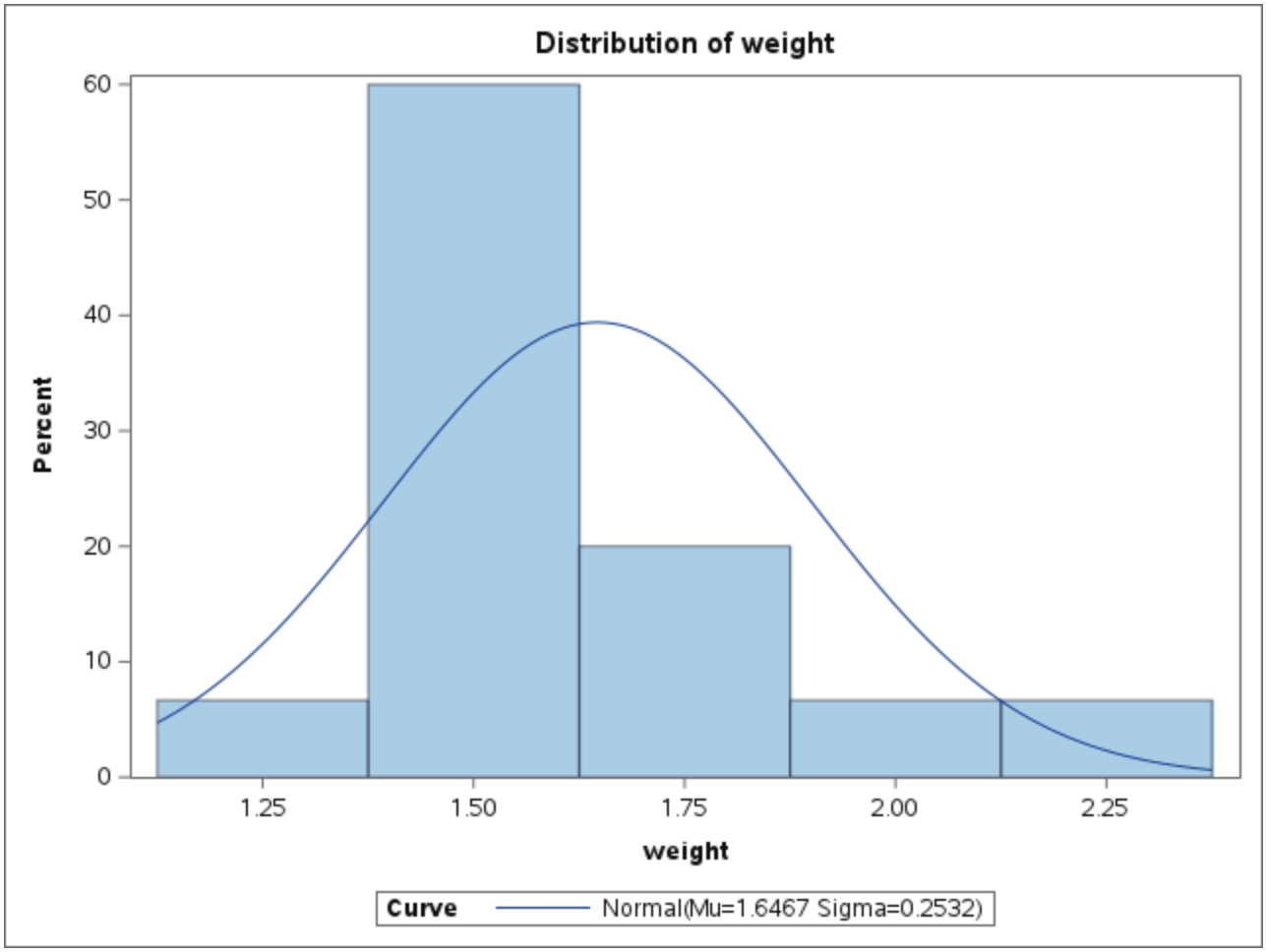
Extreme Observations

Lowest		Highest	
Value	**Obs**	**Value**	**Obs**
1.2	11	1.7	1
1.4	12	1.7	10
1.5	9	1.8	8
1.5	3	2.0	4
1.6	15	2.3	5



Normality Analysis of Bumblebee Bat Weights

The UNIVARIATE Procedure



Normality Analysis of Bumblebee Bat Weights

The UNIVARIATE Procedure
Fitted Normal Distribution for weight

Parameters for Normal Distribution

Parameter	Symbol	Estimate
Mean	Mu	1.646667
Std Dev	Sigma	0.25317

Goodness-of-Fit Tests for Normal Distribution

Test		Statistic		p Value
Kolmogorov-Smirnov	**D**	0.23978902	**Pr > D**	0.021
Cramer-von Mises	**W-Sq**	0.17197960	**Pr > W-Sq**	0.010
Anderson-Darling	**A-Sq**	0.87549869	**Pr > A-Sq**	0.020

Quantiles for Normal Distribution

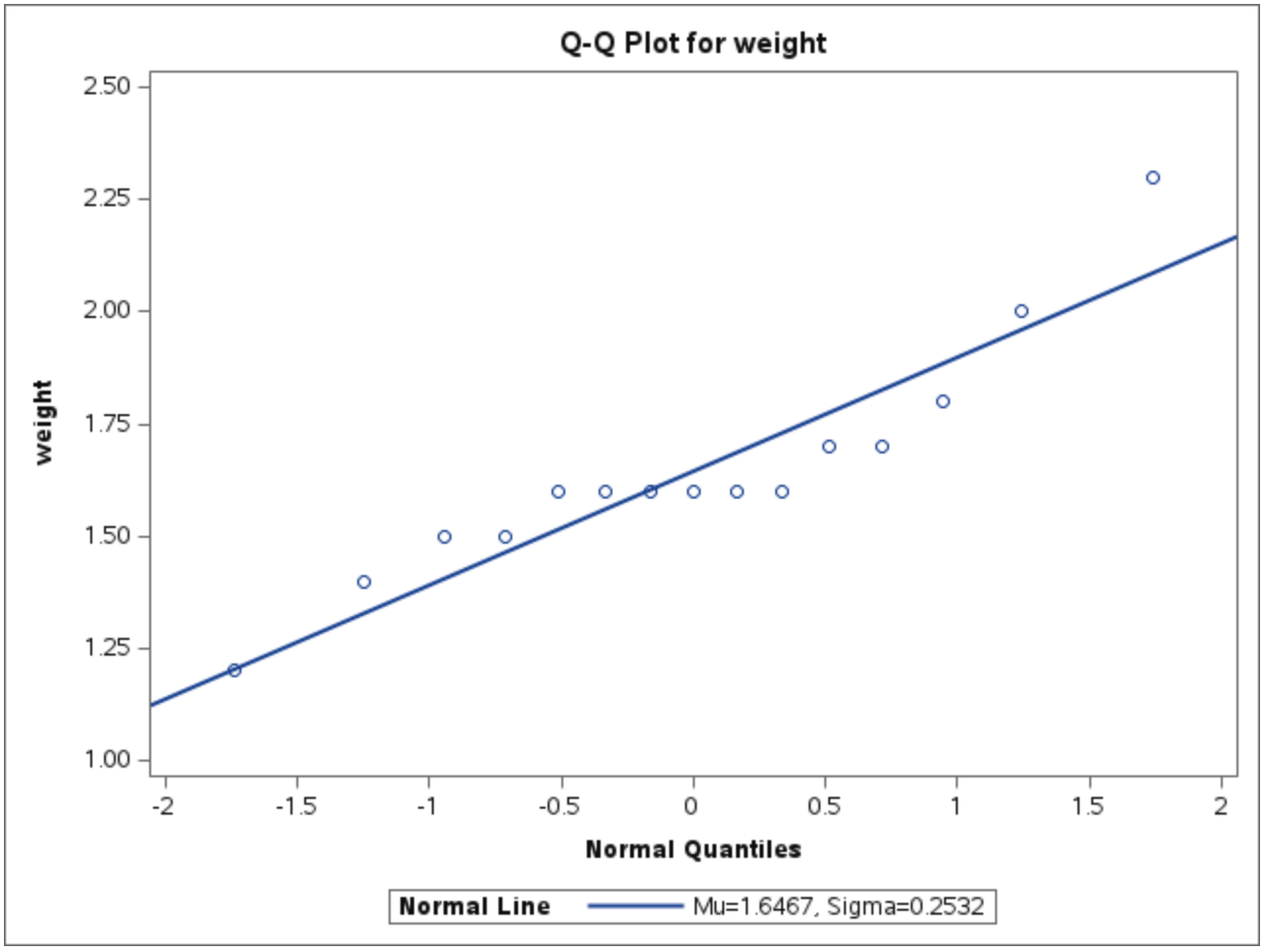
	Quantile	
Percent	**Observed**	**Estimated**
1.0	1.20000	1.05770
5.0	1.20000	1.23024

Quantiles for Normal Distribution

	Quantile	
Percent	**Observed**	**Estimated**
10.0	1.40000	1.32222
25.0	1.50000	1.47591
50.0	1.60000	1.64667
75.0	1.70000	1.81743
90.0	2.00000	1.97112
95.0	2.30000	2.06309
99.0	2.30000	2.23563

Normality Analysis of Bumblebee Bat Weights

The UNIVARIATE Procedure



One-Sample t-Test for Bumblebee Bat Weights

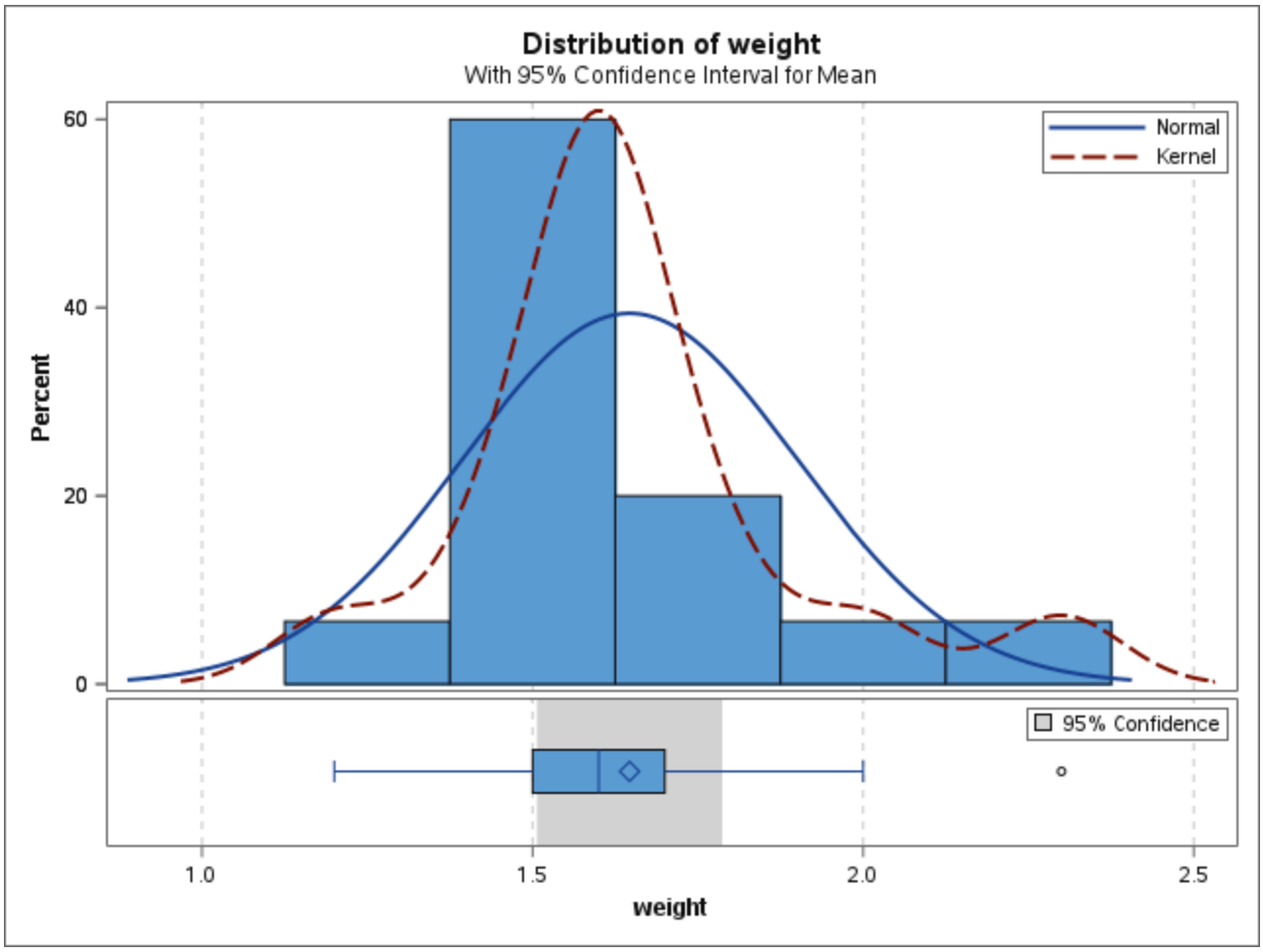
The TTEST Procedure

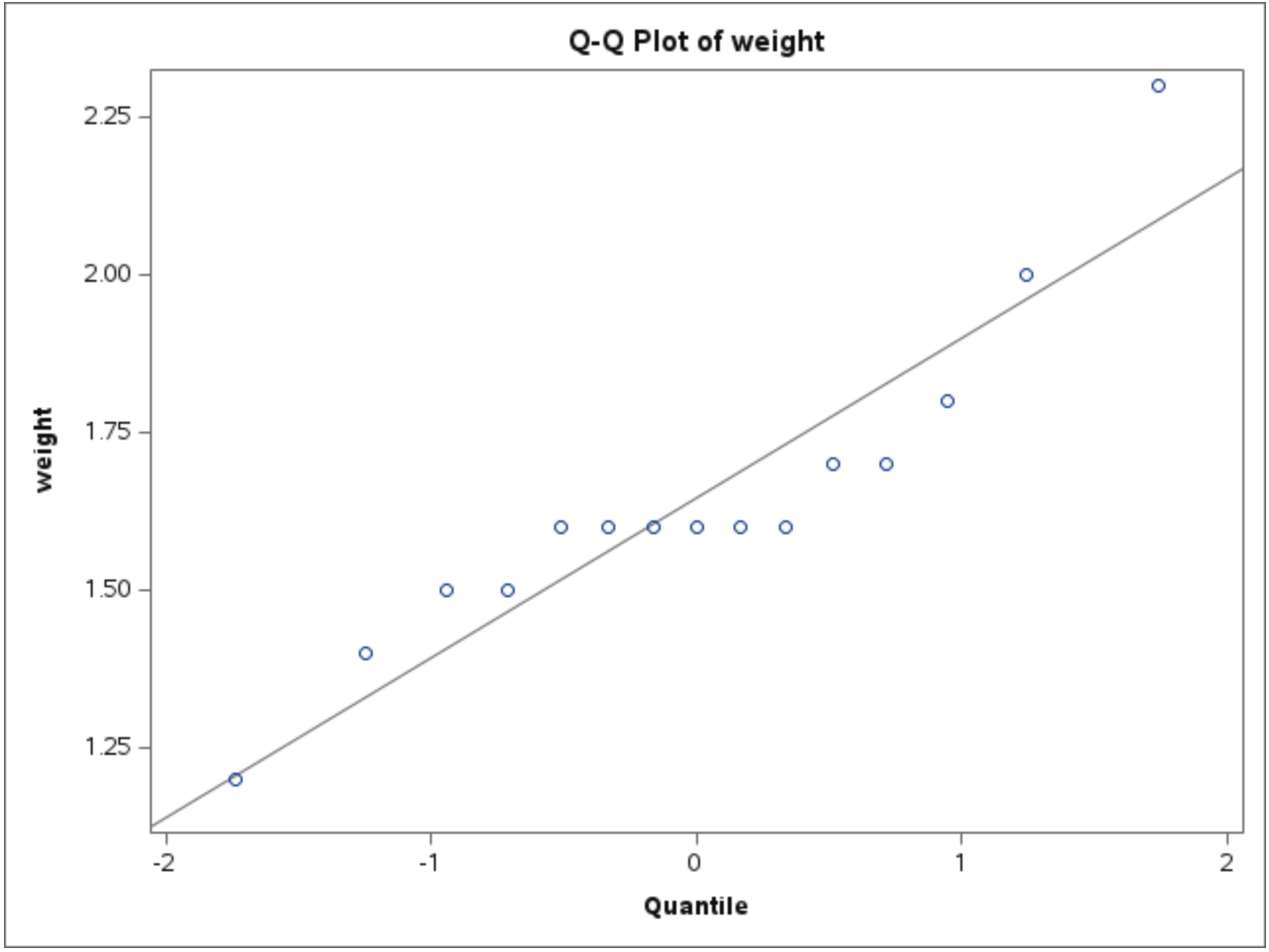
Variable: weight

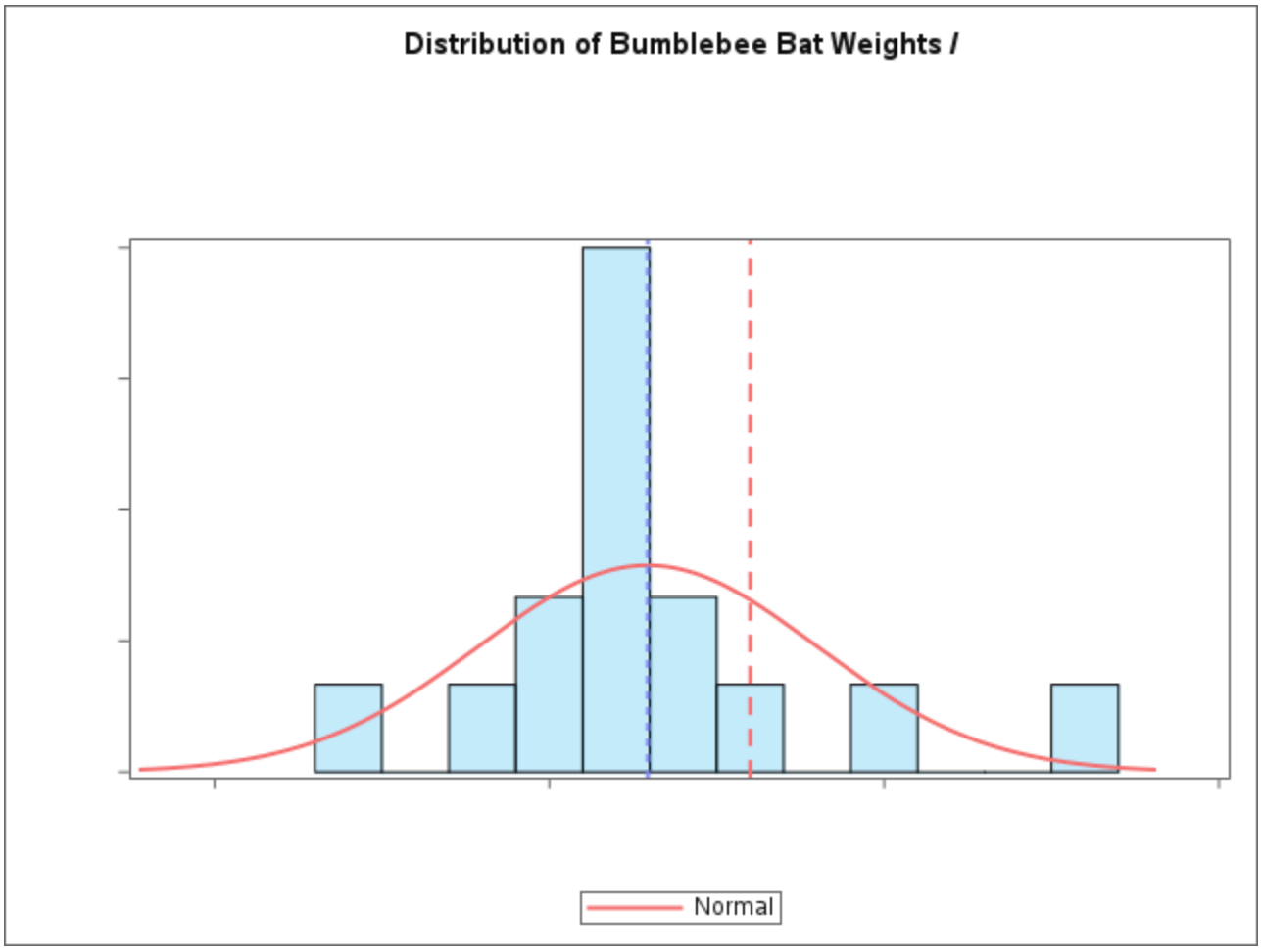
N	Mean	Std Dev	Std Err	Minimum	Maximum
15	1.6467	0.2532	0.0654	1.2000	2.3000

Mean	95% CL Mean		Std Dev	95% CL Std Dev	
1.6467	1.5065	1.7869	0.2532	0.1854	0.3993

DF	t Value	Pr > |t|
14	-2.35	0.0342




Q-Q Plot of weight
2.25
2.00
1.75
1.50
1.25
weight
-2
-1
0
1
2
Quantile


Distribution of Bumblebee Bat Weights /
Normal