**Table 1: Area Percentages**

|  |  |  |
| --- | --- | --- |
| **Buffer range (m)** | **Area (m2)** | **Area Fraction (Af)** |
| **0-100** | 205,371,218.26 | 0.34 = 17/50 |
| **100-200** | 163,521,435.25 | 0.27 = 27/100 |
| **200-300** | 112,220,840.93 | 0.18 = 9/50 |
| **300-400** | 69,301,990.98 | 0.11 = 11/100 |
| **400-500** | 39,332,777.06 | 0.06 = 3/50 |
| **500+** | 21,666,323.28 | 0.04 = 1/25 |
| **Entire Area** | 611,414,585.8 | **1.00** |

Question 1) 92 raindrops

Question 2) 3.5 sites

Question 3) 30 sites

**Table 2: Observed site counts**

|  |  |  |
| --- | --- | --- |
| **Buffer range (m)** | **Proj point count (PP)** | **End scraper count (ES)** |
| **0-100** | 23 | 28 |
| **100-200** | 16 | 25 |
| **200-300** | 9 | 12 |
| **300-400** | 3 | 16 |
| **400-500** | 2 | 4 |
| **500+** | 3 | 3 |
| **Entire** | 56 | 88 |

**Table 3. Projectile Point Observed and Expected Frequencies**

|  |  |  |
| --- | --- | --- |
| **Buffer range (m)** | **Observed Frequency**  **PP** | **Expected Frequency**  **Af\* PPtot** |
| **0-100** | 23 | 19.04 |
| **100-200** | 16 | 15.12 |
| **200-300** | 9 | 10.08 |
| **300-400** | 3 | 6.16 |
| **400-500** | 2 | 3.36 |
| **500+** | 3 | 2.24 |
| **Entire** | 56 | 56 |

**Table 4: End Scraper Observed and Expected Frequencies**

|  |  |  |
| --- | --- | --- |
| **Buffer range (m)** | **Observed Frequency**  **ES** | **Expected Frequency**  **Af\* EStot** |
| **0-100** | 28 | 29.92 |
| **100-200** | 25 | 23.76 |
| **200-300** | 12 | 15.84 |
| **300-400** | 16 | 9.68 |
| **400-500** | 4 | 5.28 |
| **500+** | 3 | 3.52 |
| **Entire** | 88 | 88 |

**Table 5: Chi-Square and *p*-Values**

|  |  |  |
| --- | --- | --- |
|  | **Projectile Point** | **End Scraper** |
| **Chi-Square Value** | **3.42** | **5.632** |
| ***p*-value** | **0.6355** | **0.3437** |

Question 4: Access to water and animals drinking from stream provide food. They could also use streams as a guide.

Question 5: Possible flooding in the lowlands near streams, and they don't want to be too close to hunting grounds

Question 6: I do not believe the results are statistically significant. There is a lot of reasons why the early humans could choose to live closer to water, and I think the end scraper data and p value (0.3437) reflects that. The projectile points indicate that they hunted near water as well, which makes sense logically, and the p value (0.6355) for that data set reflects this.