## *Model AMKE fatalities per TURBINE, using SM raptor scavenging rates*
## *Sampling unit is TURBINE*

### *The NLMIXED Procedure*

**Additional Estimates**

| Label | Estimate | Standard Error | DF | t Value | Pr > \|t\| | Alpha | Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Mean/TURBINE/Day (Winter) | 0.000533 | 0.000145 | 27E3 | 3.67 | 0.0002 | 0.1 | 0.000294 | 0.000771 |
| Mean/TURBINE/Day (Spring) | 0.000444 | 0.000119 | 27E3 | 3.72 | 0.0002 | 0.1 | 0.000248 | 0.000641 |
| Mean/TURBINE/Day (Summer) | 0.000283 | 0.000107 | 27E3 | 2.64 | 0.0082 | 0.1 | 0.000107 | 0.000458 |
| Mean/TURBINE/Day (Autumn) | 0.000671 | 0.000238 | 27E3 | 2.82 | 0.0047 | 0.1 | 0.000280 | 0.001062 |
| Aut. vs. Wint. Daily Rate | 0.000139 | 0.000276 | 27E3 | 0.50 | 0.6157 | 0.1 | -0.00032 | 0.000593 |
| Mean/TURBINE/Yr w/o Shutdown | 0.1641 | 0.02603 | 27E3 | 6.30 | <.0001 | 0.1 | 0.1213 | 0.2069 |
| Shutdown Effect | -0.7701 | 0.1475 | 27E3 | -5.22 | <.0001 | 0.1 | -1.0127 | -0.5275 |
| Mean/TURBINE/Yr w/ 4-mo Shut | 0.1133 | 0.02051 | 27E3 | 5.52 | <.0001 | 0.1 | 0.07955 | 0.1470 |
| Prop. change w/ 4-mo Shut | -0.3097 | 0.08958 | 27E3 | -3.46 | 0.0005 | 0.1 | -0.4571 | -0.1624 |
| Mean/TURBINE/Yr w/ 3-mo Shut | 0.1272 | 0.02137 | 27E3 | 5.95 | <.0001 | 0.1 | 0.09205 | 0.1623 |
| Prop. change w/ 3-mo Shut | -0.2250 | 0.07344 | 27E3 | -3.06 | 0.0022 | 0.1 | -0.3458 | -0.1042 |
| Lockdown Effect | -0.9892 | 0.002629 | 27E3 | -376.21 | <.0001 | 0.1 | -0.9935 | -0.9848 |

## *Model BUOW fatalities per TURBINE, using SM raptor scavenging rates*
## *Sampling unit is TURBINE*

### *The NLMIXED Procedure*

**Additional Estimates**

| Label | Estimate | Standard Error | DF | t Value | Pr > \|t\| | Alpha | Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Mean/TURBINE/Day (Winter) | 0.000758 | 0.000165 | 27E3 | 4.59 | <.0001 | 0.1 | 0.000486 | 0.001030 |
| Mean/TURBINE/Day (Spring) | 0.000432 | 0.000108 | 27E3 | 4.01 | <.0001 | 0.1 | 0.000255 | 0.000610 |
| Mean/TURBINE/Day (Summer) | 0.000509 | 0.000141 | 27E3 | 3.60 | 0.0003 | 0.1 | 0.000276 | 0.000741 |
| Mean/TURBINE/Day (Autumn) | 0.000861 | 0.000251 | 27E3 | 3.43 | 0.0006 | 0.1 | 0.000448 | 0.001275 |
| Aut. vs. Wint. Daily Rate | 0.000103 | 0.000286 | 27E3 | 0.36 | 0.7177 | 0.1 | -0.00037 | 0.000574 |
| Mean/TURBINE/Yr w/o Shutdown | 0.2228 | 0.03086 | 27E3 | 7.22 | <.0001 | 0.1 | 0.1720 | 0.2736 |
| Shutdown Effect | 0.4276 | 0.4012 | 27E3 | 1.07 | 0.2865 | 0.1 | -0.2323 | 1.0875 |
| Mean/TURBINE/Yr w/ 4-mo Shut | 0.2623 | 0.03292 | 27E3 | 7.97 | <.0001 | 0.1 | 0.2082 | 0.3165 |
| Prop. change w/ 4-mo Shut | 0.1775 | 0.1562 | 27E3 | 1.14 | 0.2556 | 0.1 | -0.07934 | 0.4344 |
| Mean/TURBINE/Yr w/ 3-mo Shut | 0.2520 | 0.02888 | 27E3 | 8.73 | <.0001 | 0.1 | 0.2045 | 0.2995 |
| Prop. change w/ 3-mo Shut | 0.1309 | 0.1136 | 27E3 | 1.15 | 0.2491 | 0.1 | -0.05591 | 0.3177 |
| Lockdown Effect | -0.9635 | 0.004754 | 27E3 | -202.67 | <.0001 | 0.1 | -0.9714 | -0.9557 |

## *Model GOEA fatalities per TURBINE, using LG raptor scavenging rates*
## *Sampling unit is TURBINE*

### *The NLMIXED Procedure*

| Additional Estimates | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Label** | **Estimate** | **Standard Error** | **DF** | **t Value** | **Pr > \|t\|** | **Alpha** | **Lower** | **Upper** |
| Mean/TURBINE/Day (Winter) | 0.000028 | 0.000017 | 27E3 | 1.60 | 0.1097 | 0.1 | -7.84E-7 | 0.000056 |
| Mean/TURBINE/Day (Spring) | 0.000024 | 0.000014 | 27E3 | 1.67 | 0.0949 | 0.1 | 3.608E-7 | 0.000047 |
| Mean/TURBINE/Day (Summer) | 0.000081 | 0.000026 | 27E3 | 3.15 | 0.0016 | 0.1 | 0.000039 | 0.000123 |
| Mean/TURBINE/Day (Autumn) | 0.000104 | 0.000043 | 27E3 | 2.44 | 0.0148 | 0.1 | 0.000034 | 0.000174 |
| Aut. vs. Wint. Daily Rate | 0.000076 | 0.000045 | 27E3 | 1.68 | 0.0929 | 0.1 | 1.616E-6 | 0.000151 |
| Mean/TURBINE/Yr w/o Shutdown | 0.01989 | 0.004466 | 27E3 | 4.45 | <.0001 | 0.1 | 0.01255 | 0.02724 |
| Shutdown Effect | -0.3744 | 0.6775 | 27E3 | -0.55 | 0.5805 | 0.1 | -1.4888 | 0.7399 |
| Mean/TURBINE/Yr w/ 4-mo Shut | 0.01822 | 0.004346 | 27E3 | 4.19 | <.0001 | 0.1 | 0.01107 | 0.02537 |
| Prop. change w/ 4-mo Shut | -0.08426 | 0.1690 | 27E3 | -0.50 | 0.6181 | 0.1 | -0.3622 | 0.1937 |
| Mean/TURBINE/Yr w/ 3-mo Shut | 0.01896 | 0.004078 | 27E3 | 4.65 | <.0001 | 0.1 | 0.01225 | 0.02566 |
| Prop. change w/ 3-mo Shut | -0.04704 | 0.1013 | 27E3 | -0.46 | 0.6424 | 0.1 | -0.2137 | 0.1196 |
| Lockdown Effect | -0.9992 | 0.000288 | 27E3 | -3468.5 | <.0001 | 0.1 | -0.9997 | -0.9988 |

## *Model RTHA fatalities per TURBINE, using LG raptor scavenging rates*
## *Sampling unit is TURBINE*

### *The NLMIXED Procedure*

**Additional Estimates**

| Label | Estimate | Standard Error | DF | t Value | Pr > \|t\| | Alpha | Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Mean/TURBINE/Day (Winter) | 0.000340 | 0.000062 | 27E3 | 5.51 | <.0001 | 0.1 | 0.000239 | 0.000442 |
| Mean/TURBINE/Day (Spring) | 0.000289 | 0.000048 | 27E3 | 6.02 | <.0001 | 0.1 | 0.000210 | 0.000368 |
| Mean/TURBINE/Day (Summer) | 0.000208 | 0.000041 | 27E3 | 5.09 | <.0001 | 0.1 | 0.000141 | 0.000275 |
| Mean/TURBINE/Day (Autumn) | 0.000571 | 0.000098 | 27E3 | 5.81 | <.0001 | 0.1 | 0.000410 | 0.000733 |
| Aut. vs. Wint. Daily Rate | 0.000231 | 0.000113 | 27E3 | 2.05 | 0.0407 | 0.1 | 0.000045 | 0.000417 |
| Mean/TURBINE/Yr w/o Shutdown | 0.1158 | 0.01135 | 27E3 | 10.20 | <.0001 | 0.1 | 0.09712 | 0.1345 |
| Shutdown Effect | 0.1669 | 0.3148 | 27E3 | 0.53 | 0.5959 | 0.1 | -0.3509 | 0.6847 |
| Mean/TURBINE/Yr w/ 4-mo Shut | 0.1232 | 0.01172 | 27E3 | 10.51 | <.0001 | 0.1 | 0.1039 | 0.1425 |
| Prop. change w/ 4-mo Shut | 0.06383 | 0.1172 | 27E3 | 0.54 | 0.5860 | 0.1 | -0.1290 | 0.2566 |
| Mean/TURBINE/Yr w/ 3-mo Shut | 0.1209 | 0.009836 | 27E3 | 12.29 | <.0001 | 0.1 | 0.1047 | 0.1371 |
| Prop. change w/ 3-mo Shut | 0.04412 | 0.08008 | 27E3 | 0.55 | 0.5817 | 0.1 | -0.08760 | 0.1758 |
| Lockdown Effect | -0.9892 | 0.001075 | 27E3 | -920.09 | <.0001 | 0.1 | -0.9910 | -0.9874 |

## *Model AMKEGOEARTHA fatalities per TURBINE, using SM raptor scavenging rates Sampling unit is TURBINE*

### *The NLMIXED Procedure*

**Additional Estimates**

| Label | Estimate | Standard Error | DF | t Value | Pr > \|t\| | Alpha | Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Mean/TURBINE/Day (Winter) | 0.001812 | 0.000252 | 27E3 | 7.19 | <.0001 | 0.1 | 0.001398 | 0.002227 |
| Mean/TURBINE/Day (Spring) | 0.001544 | 0.000207 | 27E3 | 7.46 | <.0001 | 0.1 | 0.001204 | 0.001884 |
| Mean/TURBINE/Day (Summer) | 0.001625 | 0.000248 | 27E3 | 6.55 | <.0001 | 0.1 | 0.001217 | 0.002033 |
| Mean/TURBINE/Day (Autumn) | 0.003574 | 0.000521 | 27E3 | 6.87 | <.0001 | 0.1 | 0.002717 | 0.004430 |
| Aut. vs. Wint. Daily Rate | 0.001762 | 0.000559 | 27E3 | 3.15 | 0.0016 | 0.1 | 0.000841 | 0.002682 |
| Mean/TURBINE/Yr w/o Shutdown | 0.7047 | 0.05375 | 27E3 | 13.11 | <.0001 | 0.1 | 0.6162 | 0.7931 |
| Shutdown Effect | -0.1618 | 0.1667 | 27E3 | -0.97 | 0.3317 | 0.1 | -0.4361 | 0.1124 |
| Mean/TURBINE/Yr w/ 4-mo Shut | 0.6652 | 0.05034 | 27E3 | 13.22 | <.0001 | 0.1 | 0.5824 | 0.7480 |
| Prop. change w/ 4-mo Shut | -0.05601 | 0.05996 | 27E3 | -0.93 | 0.3503 | 0.1 | -0.1546 | 0.04262 |
| Mean/TURBINE/Yr w/ 3-mo Shut | 0.6783 | 0.04748 | 27E3 | 14.28 | <.0001 | 0.1 | 0.6002 | 0.7564 |
| Prop. change w/ 3-mo Shut | -0.03745 | 0.04073 | 27E3 | -0.92 | 0.3578 | 0.1 | -0.1044 | 0.02954 |
| Lockdown Effect | -0.9291 | 0.006374 | 27E3 | -145.77 | <.0001 | 0.1 | -0.9396 | -0.9186 |

## *Model AMKEGOEARTHA fatalities per TURBINE, using LG raptor scavenging rates Sampling unit is TURBINE*

### *The NLMIXED Procedure*

**Additional Estimates**

| Label | Estimate | Standard Error | DF | t Value | Pr > \|t\| | Alpha | Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Mean/TURBINE/Day (Winter) | 0.000499 | 0.000075 | 27E3 | 6.62 | <.0001 | 0.1 | 0.000375 | 0.000623 |
| Mean/TURBINE/Day (Spring) | 0.000427 | 0.000059 | 27E3 | 7.25 | <.0001 | 0.1 | 0.000331 | 0.000524 |
| Mean/TURBINE/Day (Summer) | 0.000343 | 0.000052 | 27E3 | 6.55 | <.0001 | 0.1 | 0.000257 | 0.000429 |
| Mean/TURBINE/Day (Autumn) | 0.000814 | 0.000118 | 27E3 | 6.91 | <.0001 | 0.1 | 0.000621 | 0.001008 |
| Aut. vs. Wint. Daily Rate | 0.000316 | 0.000137 | 27E3 | 2.31 | 0.0210 | 0.1 | 0.000091 | 0.000541 |
| Mean/TURBINE/Yr w/o Shutdown | 0.1734 | 0.01378 | 27E3 | 12.58 | <.0001 | 0.1 | 0.1507 | 0.1960 |
| Shutdown Effect | -0.09070 | 0.2235 | 27E3 | -0.41 | 0.6849 | 0.1 | -0.4583 | 0.2769 |
| Mean/TURBINE/Yr w/ 4-mo Shut | 0.1675 | 0.01341 | 27E3 | 12.49 | <.0001 | 0.1 | 0.1454 | 0.1896 |
| Prop. change w/ 4-mo Shut | -0.03378 | 0.08473 | 27E3 | -0.40 | 0.6901 | 0.1 | -0.1732 | 0.1056 |
| Mean/TURBINE/Yr w/ 3-mo Shut | 0.1693 | 0.01168 | 27E3 | 14.49 | <.0001 | 0.1 | 0.1501 | 0.1885 |
| Prop. change w/ 3-mo Shut | -0.02348 | 0.05932 | 27E3 | -0.40 | 0.6923 | 0.1 | -0.1211 | 0.07410 |
| Lockdown Effect | -0.9867 | 0.001187 | 27E3 | -831.24 | <.0001 | 0.1 | -0.9887 | -0.9848 |