

| | Dates | poultry outbrea |
|------|-----------|-----------------|
| 2006 | Jan - Dec | 1007 |
| 2007 | Jan - Dec | 282 |
| 2008 | Jan - Dec | 115 |
| 2009 | Jan - Dec | 176 |
| 2010 | Jan - Dec | 476 |
| 2011 | Jan - Dec | 386 |
| 2012 | Jan - Dec | 97 |
| 2013 | Jan - Dec | 98 |
| 2014 | Jan - Dec | 366 |
| 2015 | Jan - Apr | 189 |
| | | 3192 |

| | Year | Cases |
|------------------------------|--------------|------------|
| | 2006 | 18 |
| | 2007 | 25 |
| | 2008 | 8 |
| | 2009 | 39 |
| | 2010 | 29 |
| | 2011 | 39 |
| | 2012 | 11 |
| | 2013 | 4 |
| | 2014 | 38 |
| | 2015* | 131 |
| | Total | 342 |
| | | |
| 2015*: As at 15th April 2015 | | |

| Year | poulOut |
|------|---------|
| 2006 | 1007 |
| 2007 | 282 |
| 2008 | 115 |
| 2009 | 176 |
| 2010 | 476 |
| 2011 | 386 |
| 2012 | 97 |
| 2013 | 98 |
| 2014 | 366 |
| 2015 | 189 |

| Name | Area(km ²) | human Populati |
|------|------------------------|----------------|
|------|------------------------|----------------|

| | | |
|----------------|---------|-------------------|
| Alexandria | 2300 | 4,123,869 |
| Aswan | 34608 | 1,186,482 |
| Asyut | 13720 | 3,444,967 |
| Beheira | 9826 | 4,747,283 |
| Beni Suef | 10954 | 2,291,618 |
| Cairo | 3085 | 8,471,859 |
| Dakahlia | 3538 | 4,989,997 |
| Damietta | 910 | 1,097,339 |
| Faiyum | 6068 | 2,511,027 |
| Gharbia | 1942 | 4,011,320 |
| Giza | 13184 | 5,724,545 |
| Ismailia | 5067 | 953,006 |
| Kafr el-Sheikh | 3467 | 2,620,208 |
| Matruh | 166563 | 323,381 |
| Minya | 2262 | 4,166,299 |
| Monufia | 2499 | 3,270,431 |
| New Valley | 440098 | 187,263 |
| North Sinai | 27564 | 343,681 |
| Port Said | 1345 | 570,603[citation] |
| Qalyubia | 1124 | 4,251,672 |
| Qena | 8980 | 3,001,681 |
| Red Sea | 120000 | 288,661 |
| Al Sharqia | 4911 | 5,354,041 |
| Sohag | 11218 | 3,747,289 |
| South Sinai | 31272 | 150,088 |
| Suez | 9002 | 512,135 |
| Luxor | 2409.68 | 457,286 |

| | | |
|---------------|-------------|--|
| Human popn de | human cases | |
| 1960.434783 | | |
| 38.22815534 | | |
| 283.3819242 | | |
| 542.1331162 | | |
| 237.0823443 | | |
| 2840.194489 | | |
| 1571.226682 | | |
| 1362.637363 | | |
| 474.9505603 | | |
| 2285.787848 | | |
| 529.3537621 | | |
| 212.5518058 | | |
| 847.9953851 | | |
| 2.335452652 | | |
| 2078.249337 | | |
| 1463.385354 | | |
| 0.472622007 | | |
| 14.33028588 | | |
| 466.9144981 | | |

| | | |
|-------------|--|--|
| 4229.537367 | | |
| 311.9153675 | | |
| 2.675 | | |
| 1223.783344 | | |
| 375.3788554 | | |
| 5.084420568 | | |
| 63.98578094 | | |
| 441.5524053 | | |

chicken prev

| | |
|---------------|-------|
| Gharbia | 0.92 |
| Kafr Elshiekh | 0.87 |
| Fayoum | 4.53 |
| Alexandria | 0 |
| Assiut | 4.76 |
| Aswan | 1.16 |
| Beni suief | 4.05 |
| Behera | 0 |
| Cairo | 9.82 |
| Dakahlya | 2.26 |
| Dumyat | 3.57 |
| Giza | 8.11 |
| Ismaliya | 2.11 |
| Luxor | 9.62 |
| Matrouh | 0 |
| Menia | 5.43 |
| Menufia | 5.54 |
| Port Said | 8.7 |
| Qalubiya | 4.69 |
| Qena | 14.71 |
| Sharkia | 0.52 |
| Sohaj | 6.2 |
| Suis (Suez) | 0 |
| Wadi Elgadid | 0 |

| human cases reported | |
|----------------------|--|
| 18 | |
| 25 | |
| 8 | |
| 39 | |
| 29 | |
| 39 | |
| 11 | |
| 4 | |
| 38 | |
| 131 | |
| 342 | |

| Deaths | CFR |
|--------|-----|
| 10 | 56% |
| 9 | 36% |
| 4 | 50% |
| 4 | 10% |
| 13 | 45% |
| 15 | 38% |
| 5 | 45% |
| 3 | 75% |
| 14 | 37% |
| 38 | 29% |
| 115 | 34% |
| | |
| | |

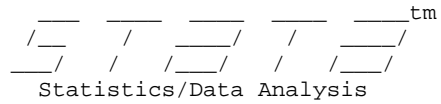
| humaCase | |
|----------|--|
| 18 | |
| 25 | |
| 8 | |
| 39 | |
| 29 | |
| 39 | |
| 11 | |
| 4 | |
| 38 | |
| 131 | |

human Population (2012-01-01)

| |
|---------|
| 4509000 |
| 1323000 |
| 3888000 |
| 5327000 |
| 2597000 |
| 8762000 |
| 5559000 |
| 1240000 |
| 2882000 |
| 4439000 |
| 6979000 |
| 1077000 |
| 2940000 |
| 389000 |
| 4701000 |
| 3657000 |
| 208000 |
| 395000 |
| 628000 |
| 4754000 |
| 2801000 |
| 321000 |
| 6010000 |
| 4211000 |
| 159000 |
| 576000 |
| 1064000 |

| projected poultry popn (2025) | poultry population densities |
|-------------------------------|------------------------------|
| 721886.5333 | 313.8637 |
| 1821207.5 | 52.62389 |
| 5733786.273 | 417.9145 |
| 9526271.222 | 969.4964 |
| 4564826.667 | 416.7269 |
| 42072.44848 | 13.63775 |
| 10604010.4 | 2997.176 |
| 2832698.71 | 3112.856 |
| 5853165.833 | 964.5956 |
| 6118666.364 | 3150.704 |
| 3270656.667 | 248.0777 |
| 1700551.222 | 335.613 |
| 7326391.333 | 2113.179 |
| 434049.4286 | 2.605917 |
| 5539075.833 | 2448.751 |
| 5904416.8 | 2362.712 |
| 473304 | 1.075451 |
| 369460.1053 | 13.40372 |
| 243356.2353 | 180.934 |

| | |
|-------------|----------|
| 3743854.4 | 3330.831 |
| 3885216.8 | 432.6522 |
| 53818.37949 | 0.448486 |
| 13098754.4 | 2667.228 |
| 7501303.444 | 668.6846 |
| 90015.66667 | 2.878475 |
| 140734 | 15.63364 |
| 432777.4286 | 179.5995 |



User: CLEBV data
Project: 01-04-2015

| | | | | | | |
|-----------|----------|----------|--------|-------|----------|----------|
| month4 | 2.976274 | 2.37486 | 1.37 | 0.172 | .6229787 | 14.21912 |
| month6 | 3.15e-07 | 1.95e-07 | -24.14 | 0.000 | 9.34e-08 | 1.06e-06 |
| month7 | 2.09e-07 | 1.56e-07 | -20.65 | 0.000 | 4.86e-08 | 9.00e-07 |
| month8 | 2.89e-07 | . | . | . | . | . |
| month9 | 6.52e-07 | 4.79e-07 | -19.41 | 0.000 | 1.55e-07 | 2.75e-06 |
| month10 | 154.955 | 207.7862 | 3.76 | 0.000 | 11.189 | 2145.953 |
| month11 | 112.6909 | 141.6056 | 3.76 | 0.000 | 9.600253 | 1322.803 |
| month12 | 130.2455 | 161.6787 | 3.92 | 0.000 | 11.43232 | 1483.854 |
| farmtype1 | .5874433 | .1511055 | -2.07 | 0.039 | .3548258 | .972561 |
| farmtype3 | 2.684589 | .8783236 | 3.02 | 0.003 | 1.4138 | 5.097621 |
| gov2 | 3.988322 | 1.674646 | 3.29 | 0.001 | 1.751385 | 9.082364 |
| gov4 | 7.653381 | 4.06115 | 3.84 | 0.000 | 2.705056 | 21.65362 |
| gov6 | 5.196878 | 2.790617 | 3.07 | 0.002 | 1.814115 | 14.88745 |
| gov8 | 14.12778 | 6.68304 | 5.60 | 0.000 | 5.590102 | 35.70495 |
| gov9 | 2.981548 | 1.383222 | 2.35 | 0.019 | 1.201008 | 7.401805 |
| gov10 | 4.473358 | 3.610046 | 1.86 | 0.063 | .919825 | 21.75515 |
| gov12 | 6.087266 | 2.637095 | 4.17 | 0.000 | 2.604169 | 14.22904 |
| gov14 | 17.62338 | 10.24904 | 4.93 | 0.000 | 5.637223 | 55.09512 |
| gov16 | 16.07535 | 8.589629 | 5.20 | 0.000 | 5.640705 | 45.81288 |
| gov17 | 6.211138 | 2.557405 | 4.44 | 0.000 | 2.771362 | 13.92032 |
| gov18 | 22.93431 | 19.29722 | 3.72 | 0.000 | 4.408329 | 119.3156 |
| gov19 | 6.443814 | 2.756368 | 4.36 | 0.000 | 2.786366 | 14.90211 |
| gov20 | 28.85175 | 14.14496 | 6.86 | 0.000 | 11.0372 | 75.41979 |
| gov22 | 9.831615 | 4.255892 | 5.28 | 0.000 | 4.2088 | 22.96632 |

note: 80 failures and 0 successes completely determined.

1 . logistic result speciel specie2 season1 season2 season3 season4 lbmtype1 lbmtype2 month1 month3 mont
> ov4 gov6 gov8 gov9 gov10 gov12 gov14 gov16 gov17 gov18 gov19 gov20 gov22

note: season4 dropped due to collinearity
note: lbmtype1 dropped due to collinearity

| | | | |
|-----------------------------|---------------|---|--------|
| Logistic regression | Number of obs | = | 4134 |
| | LR chi2(31) | = | 251.31 |
| | Prob > chi2 | = | 0.0000 |
| Log likelihood = -525.59248 | Pseudo R2 | = | 0.1929 |

| result | Odds Ratio | Std. Err. | z | P> z | [95% Conf. Interval] |
|-----------|------------|-----------|-------|-------|----------------------|
| specie1 | .3243431 | .0967526 | -3.77 | 0.000 | .1807542 .5819972 |
| specie2 | 1.599339 | .2992926 | 2.51 | 0.012 | 1.108284 2.307971 |
| season1 | 278.5591 | 388.7066 | 4.03 | 0.000 | 18.07735 4292.397 |
| season2 | 4.837755 | 2.295176 | 3.32 | 0.001 | 1.90901 12.25969 |
| season3 | 29.6782 | 35.72537 | 2.82 | 0.005 | 2.804124 314.1073 |
| lbmtype2 | 1.862037 | .4020253 | 2.88 | 0.004 | 1.219576 2.842942 |
| month1 | 43.33444 | 54.95374 | 2.97 | 0.003 | 3.609095 520.3171 |
| month3 | 9.811437 | 8.340504 | 2.69 | 0.007 | 1.854144 51.91846 |
| month4 | 3.316093 | 2.647576 | 1.50 | 0.133 | .6934664 15.85725 |
| month6 | 1.009147 | .5961725 | 0.02 | 0.988 | .3170233 3.212312 |
| month7 | .687145 | .5009889 | -0.51 | 0.607 | .1646069 2.86846 |
| month9 | 2.126267 | 1.519654 | 1.06 | 0.291 | .5239135 8.629307 |
| month10 | 169.9751 | 227.796 | 3.83 | 0.000 | 12.29217 2350.402 |
| month11 | 124.1862 | 156.287 | 3.83 | 0.000 | 10.54013 1463.191 |
| month12 | 143.7839 | 178.8403 | 3.99 | 0.000 | 12.55956 1646.061 |
| farmtype1 | .58736 | .1510996 | -2.07 | 0.039 | .354757 .9724734 |
| farmtype3 | 2.632502 | .8535644 | 2.99 | 0.003 | 1.394359 4.970075 |
| gov2 | 4.011202 | 1.683879 | 3.31 | 0.001 | 1.761753 9.132799 |
| gov4 | 7.710205 | 4.092225 | 3.85 | 0.000 | 2.724501 21.8195 |
| gov6 | 5.22651 | 2.807352 | 3.08 | 0.002 | 1.823895 14.97696 |
| gov8 | 14.27054 | 6.750434 | 5.62 | 0.000 | 5.646689 36.06506 |
| gov9 | 3.007026 | 1.395223 | 2.37 | 0.018 | 1.211128 7.465936 |
| gov10 | 4.515012 | 3.644106 | 1.87 | 0.062 | .9282108 21.96196 |
| gov12 | 6.16911 | 2.667752 | 4.21 | 0.000 | 2.643208 14.39838 |
| gov14 | 17.72648 | 10.31032 | 4.94 | 0.000 | 5.669367 55.42558 |
| gov16 | 16.22845 | 8.669136 | 5.22 | 0.000 | 5.696004 46.23635 |
| gov17 | 6.282784 | 2.582358 | 4.47 | 0.000 | 2.807309 14.06093 |
| gov18 | 23.06395 | 19.40669 | 3.73 | 0.000 | 4.433099 119.9941 |
| gov19 | 6.479444 | 2.76884 | 4.37 | 0.000 | 2.804119 14.97197 |
| gov20 | 29.00213 | 14.22269 | 6.87 | 0.000 | 11.09173 75.83341 |
| gov22 | 9.885069 | 4.280392 | 5.29 | 0.000 | 4.230541 23.09742 |

2 . logistic result speciel specie2 season1 season2 season3 season4 lbmtype1 lbmtype2 month1 month3 month4
 > 6 gov8 gov9 gov10 gov12 gov14 gov16 gov17 gov18 gov19 gov20 gov22

note: season1 dropped due to collinearity
 note: lbmtype1 dropped due to collinearity

Logistic regression Number of obs = 4134
LR chi2(30) = 251.30
Prob > chi2 = 0.0000
 Log likelihood = -525.5926 Pseudo R2 = 0.1929

| result | Odds Ratio | Std. Err. | z | P> z | [95% Conf. Interval] | |
|-----------|------------|-----------|-------|-------|----------------------|----------|
| speciel | .3243462 | .0967533 | -3.77 | 0.000 | .1807562 | .5820019 |
| specie2 | 1.59926 | .2992321 | 2.51 | 0.012 | 1.10829 | 2.307727 |
| season2 | .0172437 | .0213975 | -3.27 | 0.001 | .0015149 | .1962793 |
| season3 | .1058128 | .0788357 | -3.01 | 0.003 | .0245669 | .4557485 |
| season4 | .0035678 | .0047689 | -4.22 | 0.000 | .0002598 | .0489963 |
| lbmtype2 | 1.862359 | .4015545 | 2.88 | 0.004 | 1.22048 | 2.841817 |
| month1 | 43.34193 | 54.96407 | 2.97 | 0.003 | 3.609582 | 520.4266 |
| month3 | 9.814093 | 8.341498 | 2.69 | 0.007 | 1.855114 | 51.91941 |
| month4 | 3.313104 | 2.638049 | 1.50 | 0.132 | .6957742 | 15.77617 |
| month7 | .6825921 | .4010297 | -0.65 | 0.516 | .2158101 | 2.15899 |
| month9 | 2.111121 | 1.147392 | 1.37 | 0.169 | .7275886 | 6.125483 |
| month10 | 169.6389 | 226.3087 | 3.85 | 0.000 | 12.41566 | 2317.826 |
| month11 | 124.0179 | 155.6977 | 3.84 | 0.000 | 10.5888 | 1452.519 |
| month12 | 143.6009 | 178.2241 | 4.00 | 0.000 | 12.61028 | 1635.27 |
| farmtype1 | .5873637 | .1511002 | -2.07 | 0.039 | .3547597 | .9724783 |
| farmtype3 | 2.628545 | .8128913 | 3.13 | 0.002 | 1.433761 | 4.818967 |
| gov2 | 4.008451 | 1.673319 | 3.33 | 0.001 | 1.768661 | 9.08466 |
| gov4 | 7.710777 | 4.092376 | 3.85 | 0.000 | 2.724809 | 21.82028 |
| gov6 | 5.22634 | 2.80723 | 3.08 | 0.002 | 1.823857 | 14.9763 |
| gov8 | 14.27012 | 6.750188 | 5.62 | 0.000 | 5.646561 | 36.06377 |
| gov9 | 3.006741 | 1.394978 | 2.37 | 0.018 | 1.211102 | 7.464681 |
| gov10 | 4.514916 | 3.644023 | 1.87 | 0.062 | .9281934 | 21.96145 |
| gov12 | 6.171666 | 2.663631 | 4.22 | 0.000 | 2.648695 | 14.38046 |
| gov14 | 17.72798 | 10.31066 | 4.94 | 0.000 | 5.670186 | 55.427 |
| gov16 | 16.23212 | 8.667984 | 5.22 | 0.000 | 5.699436 | 46.22943 |
| gov17 | 6.284768 | 2.579911 | 4.48 | 0.000 | 2.811054 | 14.05107 |
| gov18 | 23.06621 | 19.40802 | 3.73 | 0.000 | 4.433752 | 120 |
| gov19 | 6.480644 | 2.768243 | 4.38 | 0.000 | 2.805581 | 14.96972 |
| gov20 | 29.00284 | 14.22297 | 6.87 | 0.000 | 11.09206 | 75.83488 |
| gov22 | 9.884245 | 4.27969 | 5.29 | 0.000 | 4.230478 | 23.09392 |

3 . logistic result speciel specie2 season1 season2 season3 season4 lbmtype1 lbmtype2 month1 month3 month4
 > gov9 gov10 gov12 gov14 gov16 gov17 gov18 gov19 gov20 gov22

note: season1 dropped due to collinearity
 note: lbmtype1 dropped due to collinearity

Logistic regression Number of obs = 4134
LR chi2(29) = 250.86
Prob > chi2 = 0.0000
 Log likelihood = -525.81714 Pseudo R2 = 0.1926

| result | Odds Ratio | Std. Err. | z | P> z | [95% Conf. Interval] | |
|----------|------------|-----------|-------|-------|----------------------|----------|
| speciel | .3234822 | .0964811 | -3.78 | 0.000 | .1802906 | .5804005 |
| specie2 | 1.59598 | .2985316 | 2.50 | 0.012 | 1.106135 | 2.302749 |
| season2 | .0181305 | .0224878 | -3.23 | 0.001 | .0015945 | .2061491 |
| season3 | .1111808 | .0824532 | -2.96 | 0.003 | .0259877 | .4756554 |
| season4 | .0038815 | .0051662 | -4.17 | 0.000 | .0002858 | .0527146 |
| lbmtype2 | 1.875633 | .4037709 | 2.92 | 0.003 | 1.230009 | 2.860142 |
| month1 | 44.69897 | 56.76673 | 2.99 | 0.003 | 3.709284 | 538.648 |
| month3 | 10.2365 | 8.693347 | 2.74 | 0.006 | 1.937621 | 54.07971 |
| month4 | 3.320671 | 2.644896 | 1.51 | 0.132 | .6970257 | 15.81987 |
| month9 | 2.267138 | 1.210447 | 1.53 | 0.125 | .7961837 | 6.455691 |
| month10 | 161.5247 | 215.273 | 3.82 | 0.000 | 11.85209 | 2201.319 |

| | | | | | | |
|-----------|----------|----------|-------|-------|----------|----------|
| month11 | 120.5506 | 151.3811 | 3.82 | 0.000 | 10.28669 | 1412.744 |
| month12 | 140.3101 | 174.2581 | 3.98 | 0.000 | 12.30098 | 1600.436 |
| farmtype1 | .5869451 | .1509788 | -2.07 | 0.038 | .3545231 | .9717408 |
| farmtype3 | 2.473323 | .7338981 | 3.05 | 0.002 | 1.382635 | 4.424397 |
| gov2 | 4.016265 | 1.67383 | 3.34 | 0.001 | 1.774489 | 9.09016 |
| gov4 | 7.667052 | 4.071639 | 3.84 | 0.000 | 2.707648 | 21.71024 |
| gov6 | 5.267832 | 2.829813 | 3.09 | 0.002 | 1.838134 | 15.09686 |
| gov8 | 14.40577 | 6.814751 | 5.64 | 0.000 | 5.699933 | 36.40855 |
| gov9 | 3.053055 | 1.415518 | 2.41 | 0.016 | 1.230505 | 7.575052 |
| gov10 | 4.557682 | 3.678732 | 1.88 | 0.060 | .9369081 | 22.1713 |
| gov12 | 6.346084 | 2.722363 | 4.31 | 0.000 | 2.737503 | 14.7115 |
| gov14 | 17.94735 | 10.43439 | 4.97 | 0.000 | 5.742767 | 56.08925 |
| gov16 | 16.54223 | 8.830632 | 5.26 | 0.000 | 5.810353 | 47.09616 |
| gov17 | 6.456808 | 2.634657 | 4.57 | 0.000 | 2.901955 | 14.3663 |
| gov18 | 23.36716 | 19.65975 | 3.75 | 0.000 | 4.492159 | 121.5505 |
| gov19 | 6.476772 | 2.7654 | 4.38 | 0.000 | 2.804913 | 14.95539 |
| gov20 | 29.2896 | 14.36616 | 6.89 | 0.000 | 11.19981 | 76.59782 |
| gov22 | 10.0284 | 4.340541 | 5.33 | 0.000 | 4.293493 | 23.42356 |

4 . logistic result speciel specie2 season1 season2 season3 season4 lbmtype1 lbmtype2 month1 month3 mont
 > v10 gov12 gov14 gov16 gov17 gov18 gov19 gov20 gov22

note: season1 dropped due to collinearity
 note: lbmtype1 dropped due to collinearity

Logistic regression
 Number of obs = 4134
 LR chi2(28) = 248.04
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.1904
 Log likelihood = -527.22393

| result | Odds Ratio | Std. Err. | z | P> z | [95% Conf. Interval] |
|-----------|------------|-----------|-------|-------|----------------------|
| specie1 | .3236043 | .0965467 | -3.78 | 0.000 | .1803267 .5807224 |
| specie2 | 1.592552 | .2978923 | 2.49 | 0.013 | 1.103757 2.297808 |
| season2 | .0335301 | .0366257 | -3.11 | 0.002 | .0039414 .2852481 |
| season3 | .2676091 | .0914497 | -3.86 | 0.000 | .1369686 .5228544 |
| season4 | .0070583 | .0084293 | -4.15 | 0.000 | .0006795 .0733214 |
| lbmtype2 | 1.888516 | .4067037 | 2.95 | 0.003 | 1.238252 2.880263 |
| month1 | 24.00117 | 26.97684 | 2.83 | 0.005 | 2.651543 217.2532 |
| month3 | 4.402744 | 2.426128 | 2.69 | 0.007 | 1.495098 12.96514 |
| month9 | 2.216379 | 1.180319 | 1.49 | 0.135 | .7804443 6.29428 |
| month10 | 88.17626 | 105.5911 | 3.74 | 0.000 | 8.43408 921.8614 |
| month11 | 65.86011 | 73.29227 | 3.76 | 0.000 | 7.436435 583.2841 |
| month12 | 75.60755 | 82.84398 | 3.95 | 0.000 | 8.828659 647.4937 |
| farmtype1 | .5879253 | .1512247 | -2.07 | 0.039 | .3551225 .9733436 |
| farmtype3 | 2.502176 | .7434299 | 3.09 | 0.002 | 1.397702 4.479414 |
| gov2 | 3.946758 | 1.639615 | 3.30 | 0.001 | 1.748328 8.909598 |
| gov4 | 7.887389 | 4.194455 | 3.88 | 0.000 | 2.781446 22.36639 |
| gov6 | 5.361227 | 2.883884 | 3.12 | 0.002 | 1.868057 15.38644 |
| gov8 | 13.64978 | 6.422567 | 5.55 | 0.000 | 5.427674 34.32713 |
| gov9 | 3.071472 | 1.426214 | 2.42 | 0.016 | 1.236226 7.631242 |
| gov10 | 4.35724 | 3.507894 | 1.83 | 0.068 | .8993582 21.1101 |
| gov12 | 6.389591 | 2.744158 | 4.32 | 0.000 | 2.753626 14.82659 |
| gov14 | 18.7855 | 10.94711 | 5.03 | 0.000 | 5.995032 58.8646 |
| gov16 | 15.52102 | 8.223496 | 5.18 | 0.000 | 5.494501 43.84419 |
| gov17 | 6.397321 | 2.605814 | 4.56 | 0.000 | 2.879248 14.21403 |
| gov18 | 24.40849 | 20.59845 | 3.79 | 0.000 | 4.668828 127.6069 |
| gov19 | 6.494412 | 2.77342 | 4.38 | 0.000 | 2.812138 14.99834 |
| gov20 | 30.53589 | 15.03036 | 6.95 | 0.000 | 11.63677 80.1288 |
| gov22 | 10.31934 | 4.474579 | 5.38 | 0.000 | 4.411247 24.14027 |

5 . logistic result speciel specie2 season1 season2 season3 season4 lbmtype1 lbmtype2 month1 month3 mon
 > v12 gov14 gov16 gov17 gov18 gov19 gov20 gov22

note: season1 dropped due to collinearity
 note: lbmtype1 dropped due to collinearity

Logistic regression Number of obs = 4134
LR chi2(27) = 245.96
Prob > chi2 = 0.0000
Pseudo R2 = 0.1888
 Log likelihood = -528.26398

| result | Odds Ratio | Std. Err. | z | P> z | [95% Conf. Interval] | |
|-----------|------------|-----------|-------|-------|----------------------|----------|
| speciel | .323268 | .096383 | -3.79 | 0.000 | .1802085 | .5798961 |
| specie2 | 1.595475 | .2978429 | 2.50 | 0.012 | 1.106593 | 2.300341 |
| season2 | .0298636 | .0326615 | -3.21 | 0.001 | .003501 | .2547367 |
| season3 | .2465511 | .08273 | -4.17 | 0.000 | .1277283 | .4759123 |
| season4 | .005569 | .0066508 | -4.35 | 0.000 | .0005361 | .0578538 |
| lbmtype2 | 1.920548 | .4134598 | 3.03 | 0.002 | 1.259438 | 2.928693 |
| month1 | 23.2457 | 26.15872 | 2.80 | 0.005 | 2.561377 | 210.9657 |
| month3 | 4.297398 | 2.360816 | 2.65 | 0.008 | 1.464165 | 12.61308 |
| month10 | 101.4059 | 121.8893 | 3.84 | 0.000 | 9.614426 | 1069.554 |
| month11 | 70.35114 | 78.64034 | 3.81 | 0.000 | 7.866396 | 629.1677 |
| month12 | 79.36281 | 87.32008 | 3.98 | 0.000 | 9.184811 | 685.7469 |
| farmtype1 | .5854494 | .1505901 | -2.08 | 0.037 | .3536244 | .9692517 |
| farmtype3 | 2.842387 | .8021505 | 3.70 | 0.000 | 1.634803 | 4.941979 |
| gov2 | 3.616453 | 1.486906 | 3.13 | 0.002 | 1.615515 | 8.095703 |
| gov4 | 7.87342 | 4.190787 | 3.88 | 0.000 | 2.773921 | 22.34769 |
| gov6 | 5.438159 | 2.928453 | 3.14 | 0.002 | 1.892689 | 15.62516 |
| gov8 | 13.81234 | 6.50768 | 5.57 | 0.000 | 5.485594 | 34.77848 |
| gov9 | 3.145435 | 1.461641 | 2.47 | 0.014 | 1.265141 | 7.820285 |
| gov10 | 4.408061 | 3.550346 | 1.84 | 0.066 | .9092256 | 21.37093 |
| gov12 | 6.587366 | 2.826518 | 4.39 | 0.000 | 2.841037 | 15.27379 |
| gov14 | 19.02853 | 11.10561 | 5.05 | 0.000 | 6.062046 | 59.72985 |
| gov16 | 15.88474 | 8.422169 | 5.22 | 0.000 | 5.619126 | 44.90466 |
| gov17 | 6.532963 | 2.659351 | 4.61 | 0.000 | 2.94181 | 14.50794 |
| gov18 | 25.21341 | 21.28961 | 3.82 | 0.000 | 4.818338 | 131.9368 |
| gov19 | 6.207039 | 2.64475 | 4.28 | 0.000 | 2.692756 | 14.30777 |
| gov20 | 31.31974 | 15.439 | 6.99 | 0.000 | 11.91846 | 82.30312 |
| gov22 | 11.22231 | 4.810541 | 5.64 | 0.000 | 4.844037 | 25.99904 |

6 . logistic result speciel specie2 season1 season2 season3 season4 lbmtype1 lbmtype2 month1 month3 mon
 > v14 gov16 gov17 gov18 gov19 gov20 gov22

note: season1 dropped due to collinearity
 note: lbmtype1 dropped due to collinearity

Logistic regression Number of obs = 4134
LR chi2(26) = 243.44
Prob > chi2 = 0.0000
Pseudo R2 = 0.1869
 Log likelihood = -529.52322

| result | Odds Ratio | Std. Err. | z | P> z | [95% Conf. Interval] | |
|-----------|------------|-----------|-------|-------|----------------------|----------|
| speciel | .322101 | .0960384 | -3.80 | 0.000 | .1795542 | .5778146 |
| specie2 | 1.591544 | .2970674 | 2.49 | 0.013 | 1.103923 | 2.294554 |
| season2 | .0296716 | .0324241 | -3.22 | 0.001 | .0034848 | .2526426 |
| season3 | .2458662 | .0824891 | -4.18 | 0.000 | .1273847 | .4745482 |
| season4 | .0055699 | .0066421 | -4.35 | 0.000 | .000538 | .0576636 |
| lbmtype2 | 1.975793 | .4216245 | 3.19 | 0.001 | 1.300467 | 3.001813 |
| month1 | 23.48212 | 26.40736 | 2.81 | 0.005 | 2.591187 | 212.802 |
| month3 | 4.252292 | 2.332493 | 2.64 | 0.008 | 1.451165 | 12.46032 |
| month10 | 101.8266 | 122.2056 | 3.85 | 0.000 | 9.689586 | 1070.083 |
| month11 | 71.44125 | 79.80511 | 3.82 | 0.000 | 8.000084 | 637.9748 |
| month12 | 79.85859 | 87.79784 | 3.98 | 0.000 | 9.257563 | 688.8847 |
| farmtype1 | .5894818 | .1516857 | -2.05 | 0.040 | .3559909 | .9761171 |
| farmtype3 | 2.767806 | .7758902 | 3.63 | 0.000 | 1.597795 | 4.794576 |
| gov2 | 3.24508 | 1.281865 | 2.98 | 0.003 | 1.496185 | 7.038262 |
| gov4 | 6.909655 | 3.582865 | 3.73 | 0.000 | 2.500821 | 19.09106 |
| gov6 | 4.682261 | 2.448634 | 2.95 | 0.003 | 1.680009 | 13.04968 |

| | | | | | | |
|-------|----------|----------|------|-------|----------|----------|
| gov8 | 11.85714 | 5.370127 | 5.46 | 0.000 | 4.88055 | 28.80654 |
| gov9 | 2.740215 | 1.228283 | 2.25 | 0.025 | 1.138254 | 6.59675 |
| gov12 | 5.757389 | 2.366196 | 4.26 | 0.000 | 2.572736 | 12.88415 |
| gov14 | 16.5879 | 9.460618 | 4.92 | 0.000 | 5.42405 | 50.72935 |
| gov16 | 14.03075 | 7.246389 | 5.11 | 0.000 | 5.098768 | 38.60971 |
| gov17 | 5.762908 | 2.244705 | 4.50 | 0.000 | 2.685907 | 12.36495 |
| gov18 | 22.31544 | 18.65406 | 3.71 | 0.000 | 4.335748 | 114.8542 |
| gov19 | 5.516852 | 2.260793 | 4.17 | 0.000 | 2.470989 | 12.31719 |
| gov20 | 27.41738 | 13.09496 | 6.93 | 0.000 | 10.75175 | 69.91538 |
| gov22 | 9.845656 | 4.048041 | 5.56 | 0.000 | 4.398182 | 22.04023 |

7 . estat gof, group(10)

Logistic model for result, goodness-of-fit test

(Table collapsed on quantiles of estimated probabilities)

number of observations = 4134
 number of groups = 10
 Hosmer-Lemeshow chi2(8) = 11.77
 Prob > chi2 = 0.1620

8 . estat ic

| Model | Obs | ll(null) | ll(model) | df | AIC | BIC |
|-------|------|----------|-----------|----|----------|----------|
| . | 4134 | -651.245 | -529.5232 | 27 | 1113.046 | 1283.875 |

9 .