fatalityCMR Q and A

Q1

| Probability of not finding a carcass given it is in surveyed area (P0): | - |
|---|---|
| Uniform entry rate Pulsed entry rate SE(unif) SE(pulse) Type1 0.3178 0.3174 0.0991 0.0991 Type2 0.3178 0.3174 0.0991 0.0991 | _ |

OK, this one I think I understand, with P0 having same meaning as in our paper, right?

==Yes.

Q2

Maximum number of fatalities (with risk threshold 0.05)Uniform entry rate Pulsed entry rate SE(unif) SE(pulse)Type12.61352.61030.82340.8219Type22.61352.61030.82340.8219

labeling causes me to interpret this as follows: Pr(number of fatalities > 2.6135) < 0.05.

Is my interpretation correct?

Also, is this conditional on the observed number of carcasses? So if you really observed 1 carcass, would I rewrite above as: Pr(number of fatalities > 2.6135 | 1 carcass observed) < 0.05

== Here, knowing that x carcasses have been observed, I compute Nmax that verifies

Pr(number of fatalities = Nmax | x) = 0.05

So in the example,

Pr(number of fatalities = 2.6135 | 1 carcass observed) = 0.05

Q3

| Ad-hoc estimate of the number of fatalities | | | | | | | |
|---|--------------------------|------------|----------|-----------|--|--|--|
| U | niform entry rate Pulsed | entry rate | SE(unif) | SE(pulse) | | | |
| Type1 | 0.6504 | 0.6487 | 0.5938 | 0.5918 | | | |
| Type2 | 0.6504 | 0.6487 | 0.5938 | 0.5918 | | | |
| | | | | | | | |

I don't know what the above labeling means: "ad-hoc estimate of the number of fatalities". I guess if 1 carcass had been observed and you then divided this 1 by (1-P0),

I would understand, but this does not seem to be what was done. In addition, how would you compute this if no carcasses were observed? Bottom line is that I would appreciate an explanation of what this is, thanks.

==Sorry about the text. Throughout, if any of you can think of better labels and text, feel free to change.

This "ad hoc" estimate is the sum over n of [n * Pr(number of fatalities = n | x carcasses observed)]I stopped the sum at a finite maximum n, so divided the whole thing by sum over n of [Pr(number of fatalities = n | x carcasses observed)]I realize I should have run this by you, let me know if clarifications are needed

Q4

I assume this is based on simple area expansion. Is variance computed by treating area searched as a known constant, I assume? So if you searched 50% of turbines, then var for entire area estimate would be 4*var(number fatalities in searched area)?

==Yes,

this is a simple multiplication by a correction factor that is derived from the proportion of turbine searched and the proportion of the death zone around each turbine that is searched.