**[**Everything is fixed except the two items that say "check"...which I need to fix.

I also need to add an acknowledgement! - Hank]

**Possible errors in the primer book 2021-10-16 version (and some suggestions).**

|  |  |  |
| --- | --- | --- |
| **Location** | **Original text** | **Correction** |
|  |  |  |
| Figure 4.5 legend | …using a post-breeding census… | should be ‘pre-breeding’ |
|  |  |  |
| 5.2.2, below the subsection title | …we are no long able to do that… | I think using integral to do projection is still possible for logistic growth model |
| 5.5 | Maximum sustained yield | Surely it is good, but “sustainable” is widely used |
|  |  |  |
| Equation 6.1 | n2,t+1=PAn2,t+β2PJn1,t=λ2n2 | “n1,t” should be “n2,t” |
| Equation 6.11 | c−2cp−e+2ep | “c” should be “ci” |
|  |  |  |
| Figure 7.2 |  | Apparent competition might deserve a place here |
| 7.1.1.1, below equation 7.6 | m = α21/α22 | Negative sign missing |
| Figure 7.8 | x-axis | Title should be *β*ij |
| 7.2, below the Lotka-Volterra model | …the sign of the interspecific terms αijNj | A word ‘positive’ should be added to the end of the sentence. |
| Figure 7.10, and text above this figure | An obligate mutualism… | I think obligate mutualism should be modelled by modifying a predator-prey model |
| 7.3 | …and αij<0,αji>0 can be predation by j of i,… | I doubt that this can help model predator-prey interactions. The growth of predator should definitely depend on prey, and there should be not an element of growing by self for predator; however, such an element is inherent in the “generalized LV models” written here. In other word, the growth of predator should be zero when prey density is zero, this generalized LV model allows predator to grow when prey has zero density. |
|  |  |  |
| Figure 8.5 legend | … the black lines are tow… | … the black lines are two… |
| 8.3: the code | [curve](https://rdrr.io/r/graphics/curve.html)(x/(1+x), add=TRUE, lty=2 )  [curve](https://rdrr.io/r/graphics/curve.html)(x^3/(1+x^3), add=TRUE, lty=3 ) | Should be [curve](https://rdrr.io/r/graphics/curve.html)(0.5\*x/(1+0.5\*x), add=TRUE, lty=2 )  [curve](https://rdrr.io/r/graphics/curve.html)(0.5\*x^3/(1+0.5\*x^3), add=TRUE, lty=3 ) |
| Figure 8.6 |  | Those are wrong due to the errors in the code. Type II and III curves should be always lower than type I curve |
| 8.4: line 9 below the section tile | …equilibrium is at (r/a, m/(ea)). | equilibrium is at (m/(ea), r/a). |
| 8.5.2: the equation | dN/dt=r(1−αN)−aNP/(1+ahN) | “r(1- αN)” should be “rN(1- αN)” |
|  |  |  |
| 9.1: the 5th line below equation 9.1 | …thos… | …those… |
| 9.2: Line 1 in Paragraph 1 | Within | With |
| 9.2.1: below the P\* equation | Increasing k … | Increasing k should decrease parasitoid density only to a certain level. |
| 9.3: whole subsection |  | I am not sure if the Jacobian analysis approach here works well. I did some simulation work (as 9.3.0.1), and found that k < 1 leads to damped oscillation, and k > 1 leads to increased oscillation (the same as May 1978 suggested). However, if using eigen analysis here, some k value larger than one can lead to modulus of lambda < 1 (particularly when R is not large). |
| Equation 9.7 |  | Something might be wrong with the elements here. I just let R do the work (using the code in this section). The four elements might be:  R\*(1+a\*P/k)^(-k) -1  -a\*R\*H\*(1+a\*P/k)^(-(k+1))  1-(1+a\*P/k)^(-k)  a\*H\*(1+a\*P/k)^(-(k+1)) -1 |
|  |  |  |
| 10.2: Disease model with population growth | … R0=1+1/(b+α) | + should be \* |
|  |  |  |
| 11.1: ~Line 13 | …mass-specific growth rate (dN/dt)… | …mass-specific growth rate (dN/(Ndt))… |
| 11.1: below the N2\* equation | …resource turnover rate, b, … | …resource turnover rate, r, … |
|  |  |  |