Table S3. Parameter hyperpriors used for each simulation ran in MSVAR 1.3, for South Cascades and Chilliwack Valley datasets: ancestral population size (log N0), current population size (log N1), mutation rate (log u), and time since decline/expansion (log T).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **Ancestral size** | | | | **Current size** | | | | **Mutation rate** | | | | **Time since decline/exp** | | | |
| **Run** | **α** | **β** | **δ** | **τ** | **α** | **β** | **δ** | **τ** | **α** | **β** | **δ** | **τ** | **α** | **β** | **δ** | **τ** |
| **1** | 6 | 2 | 0 | 0.5 | 5 | 2 | 0 | 0.5 | -3.5 | 0.25 | 0 | 0.5 | 5 | 2 | 0 | 0.5 |
| **2** | 6 | 2 | 0 | 0.5 | 5 | 2 | 0 | 0.5 | -3.5 | 0.25 | 0 | 0.5 | 5 | 2 | 0 | 0.5 |
| **3** | 3 | 2 | 0 | 0.5 | 4 | 3 | 0 | 0.5 | -3.5 | 0.25 | 0 | 0.5 | 5 | 2 | 0 | 0.5 |
| **4** | 3 | 2 | 0 | 0.5 | 4 | 3 | 0 | 0.5 | -3.5 | 0.25 | 0 | 0.5 | 5 | 2 | 0 | 0.5 |
| **5** | 6 | 2 | 0 | 0.5 | 5 | 2 | 0 | 0.5 | -3.5 | 0.25 | 0 | 0.5 | 5 | 2 | 0 | 0.5 |