

Modeling School Populations

Dataset

- From the Integrated Postsecondary Education Data System
- Can divide into groups by number of years in school
- Also access full-time first-time freshmen

Dataset

- Divided by state
- Considered only Title IX Compliant public schools

Models 1 and 2

Model 1

$$\begin{bmatrix} x_1(n) \\ x_2(n) \\ x_3(n) \\ x_4(n) \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 & 0 \\ p_1 & 0 & 0 & 0 \\ 0 & p_2 & 0 & 0 \\ 0 & 0 & p_3 & 0 \end{bmatrix} \times \begin{bmatrix} x_1(n-1) \\ x_2(n-1) \\ x_3(n-1) \\ x_4(n-1) \end{bmatrix} + \begin{bmatrix} \beta_1 n + \alpha_1 \\ \beta_2 n + \alpha_2 \\ \beta_3 n + \alpha_3 \\ \beta_4 n + \alpha_4 \end{bmatrix}$$

Model 2

$$\begin{bmatrix} x_1(n) \\ x_2(n) \\ x_3(n) \\ x_4(n) \end{bmatrix} = \begin{bmatrix} q_1 & 0 & 0 & 0 \\ p_1 & q_2 & 0 & 0 \\ 0 & p_2 & q_3 & 0 \\ 0 & 0 & p_3 & q_4 \end{bmatrix} \times \begin{bmatrix} x_1(n-1) \\ x_2(n-1) \\ x_3(n-1) \\ x_4(n-1) \end{bmatrix} + \begin{bmatrix} u(n) \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

Models 3 and 4

Model 3

$$\begin{bmatrix} x_1(n) \\ x_2(n) \\ x_3(n) \\ x_4(n) \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 & 0 \\ p_1 & 0 & 0 & 0 \\ 0 & p_2 & 0 & 0 \\ 0 & 0 & p_3 & q \end{bmatrix} \times \begin{bmatrix} x_1(n-1) \\ x_2(n-1) \\ x_3(n-1) \\ x_4(n-1) \end{bmatrix} + \begin{bmatrix} u(n) \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

Model 4

$$\begin{bmatrix} x_1(n) \\ x_2(n) \\ x_3(n) \\ x_4(n) \end{bmatrix} = \begin{bmatrix} 0 & 0 & 0 & 0 \\ p_1 & 0 & 0 & 0 \\ 0 & p_2 & 0 & 0 \\ 0 & 0 & p_3 & q \end{bmatrix} \times \begin{bmatrix} x_1(n-1) \\ x_2(n-1) \\ x_3(n-1) \\ x_4(n-1) \end{bmatrix} + \begin{bmatrix} \beta_1 n + \alpha_1 \\ \beta_2 n + \alpha_2 \\ \beta_3 n + \alpha_3 \\ \beta_4 n + \alpha_4 \end{bmatrix}$$

Uncorrelated Observation Process

- First model: Assume uncorrelated, independent identically distributed errors, denoted ε_j for time j . f is a function of time and the parameters, and y_j is the data vector at time j .

$$y_j = f(t_j; \theta_0) + \varepsilon_j$$

Uncorrelated Bootstrapping

- Form standardized residuals. Here N is the number of time points, k is the number of parameters, and $\hat{\theta}_0$ is the parameter estimate.

$$r_{\downarrow j} = \sqrt{N/N-k} (y_{\downarrow j} - f(t_{\downarrow j}, \hat{\theta}_0))$$

- Now, for each of M bootstrapping samples, sample N values $\{r_{\downarrow 1}^{\uparrow m}, \dots, r_{\downarrow N}^{\uparrow m}\}$ from the $r_{\downarrow j}$ with replacement and create a bootstrap sample using

$$y_{\downarrow j}^{\uparrow m} = f(t_{\downarrow j}, \hat{\theta}_0) + r_{\downarrow j}^{\uparrow m}.$$

Uncorrelated Bootstrapping

- From these samples, we fit parameters and get a set of parameter vectors $\{\hat{\theta}_1, \dots, \hat{\theta}_M\}$. We can get the mean, covariance matrix, and standard errors via

$$\hat{\theta}_{BOOT} = 1/M \sum_{m=1}^M \hat{\theta}_m$$

$$Var(\hat{\theta}_{BOOT}) = 1/(M-1) \sum_{m=1}^M (\hat{\theta}_m - \hat{\theta}_{BOOT})^T (\hat{\theta}_m - \hat{\theta}_{BOOT})$$

$$SE_k(\hat{\theta}_{BOOT}) = \sqrt{Var(\hat{\theta}_{BOOT})_{kk}}$$

Durbin-Watson Test

- Test for “autocorrelation” – correlation between consecutive residuals

$$d = \frac{\sum_{j=2}^N (e_j - e_{j-1})^2}{\sum_{j=1}^N e_j^2}$$

- The e -values are the residuals at time j .
- If d is below a threshold, there is autocorrelation.

Durbin-Watson Test Results

Student Classification	Autocorrelated states
First year	All states but Arkansas, Hawaii, Idaho, Kansas, Minnesota, Nevada, New Hampshire, New Jersey, Tennessee, Texas, Utah, Vermont, Virginia, and Wyoming
Second year	All states but Idaho
Third year	All states
Fourth year	All states

Autocorrelated Observation Process

- As we have detected autocorrelation, we use a statistical model that accounts for a relationship between consecutive values. In this case, the u have mean 0 and are independently identically distributed and assumed to be normal.

$$y_{\downarrow j} = f(t_{\downarrow j}; \theta_{\downarrow 0}) + \varepsilon_{\downarrow j} \text{ where } \varepsilon_{\downarrow j} = \rho \varepsilon_{\downarrow j-1} + u_{\downarrow j}$$

- ρ is determined from the following formula:

$$\rho = \frac{\sum_{j=2}^{\uparrow N} r_{\downarrow j} r_{\downarrow j-1}}{\sum_{j=1}^{\uparrow N} r_{\downarrow j}^2}$$

Autocorrelated Bootstrapping

- To perform autocorrelated bootstrapping, we perform analogous steps to the uncorrelated method.
 - Sample u_{jt}^m with replacement from the u values
 - Compute M new time series recursively based on the u_{jt}^m values and the definition of ε_{jt} , with an ε_{0t}^m sampled uniformly from within the interval $[-2|\varepsilon_{0t}|, 2|\varepsilon_{0t}|]$
 - Compute θ_t^m , θ_{BOOT} , $VAR(\theta_{BOOT})$, and $SE_k(\theta_{BOOT})$ using the same formulae as in the uncorrelated case.

AIC Scores

- Corrected a previous mistake in AIC scores
- Now Model 2 is best for all 51 datasets
- Model 2 has by far the best average
- AIC file is called AICComparison.xlsx

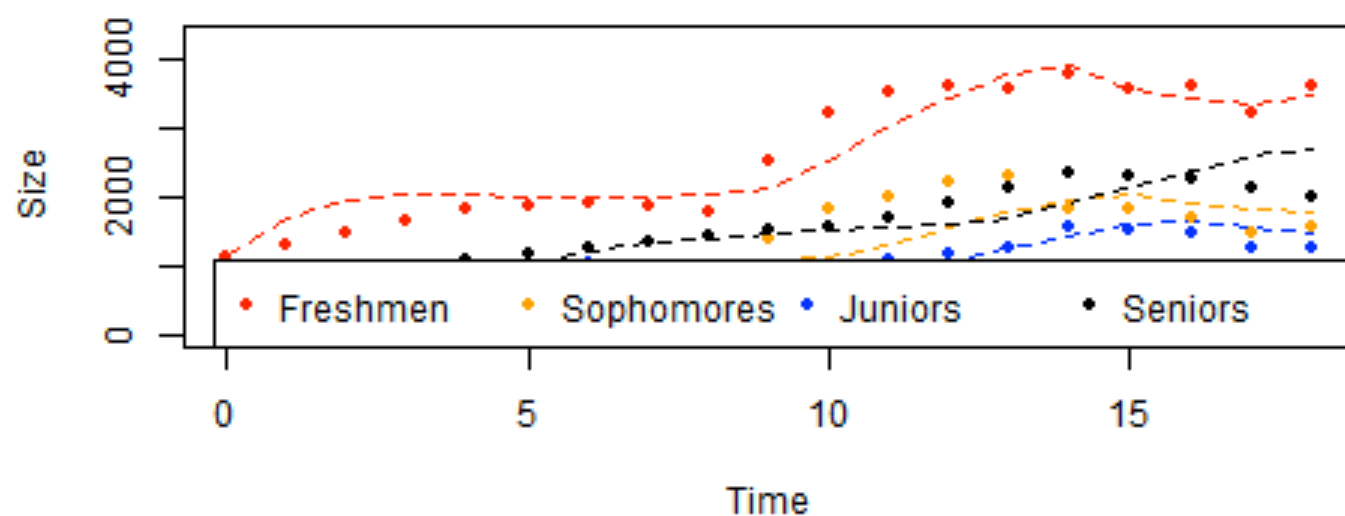
Model	Model 1	Model 2	Model 3	Model 4
Average AIC	349.1	290.9	341.7	354.6

Fits and Residuals

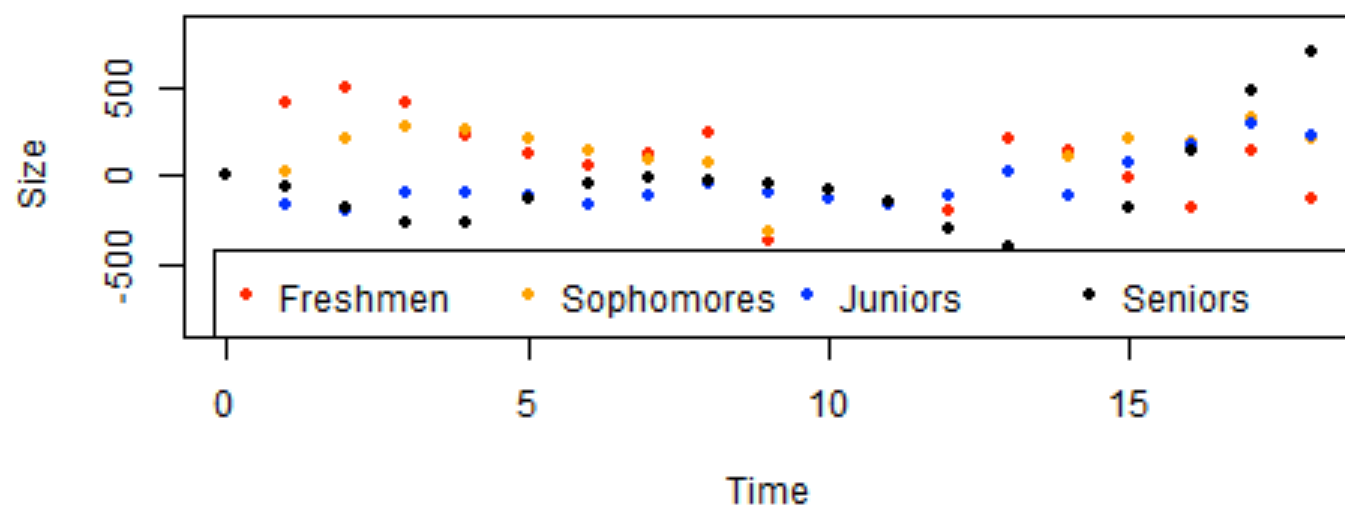
- Plots on following slides.
- Trends in residuals indicate that observation errors may have longitudinal correlations.

Note: Residual plots for all four models are available, but we only give those for Model 2 here as it had the lowest AIC score.

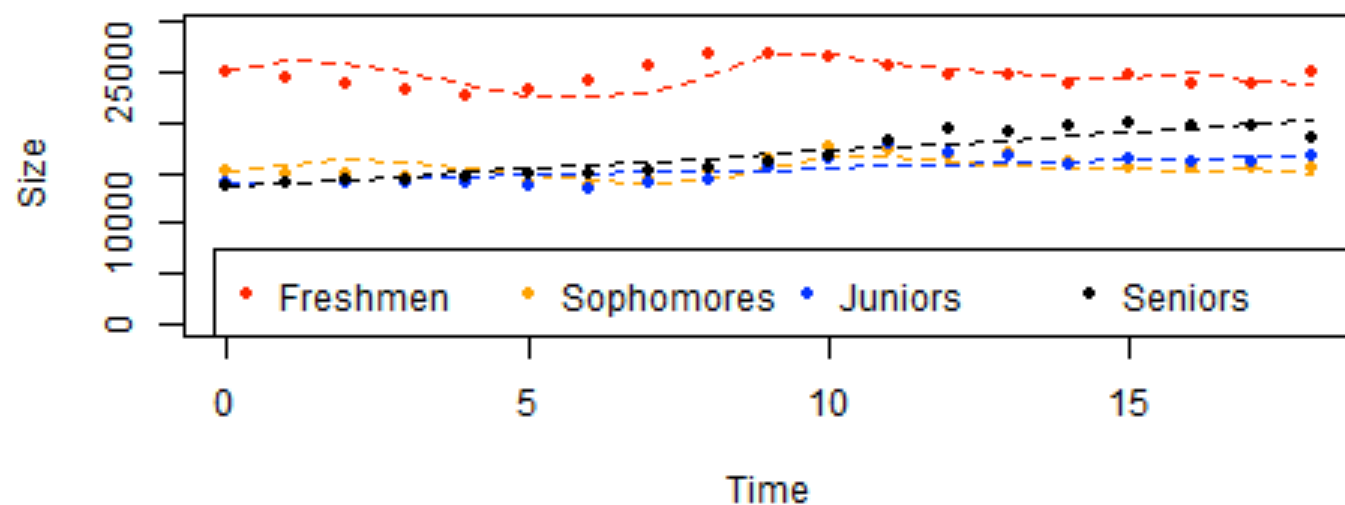
Alabama Model 2 Groups



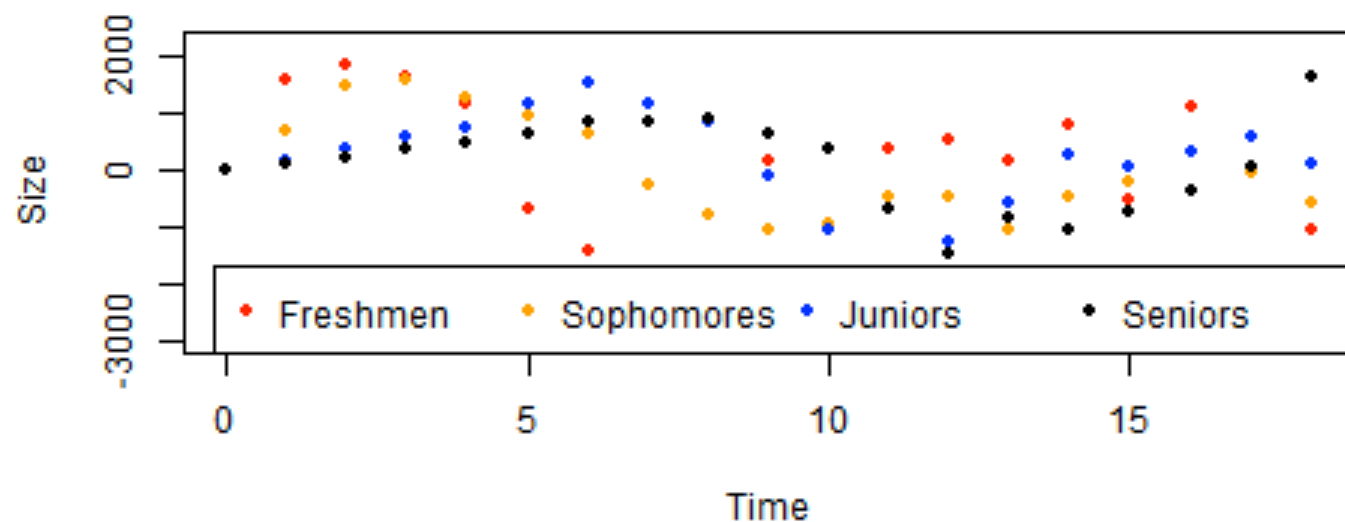
Alabama Model 2 Residuals



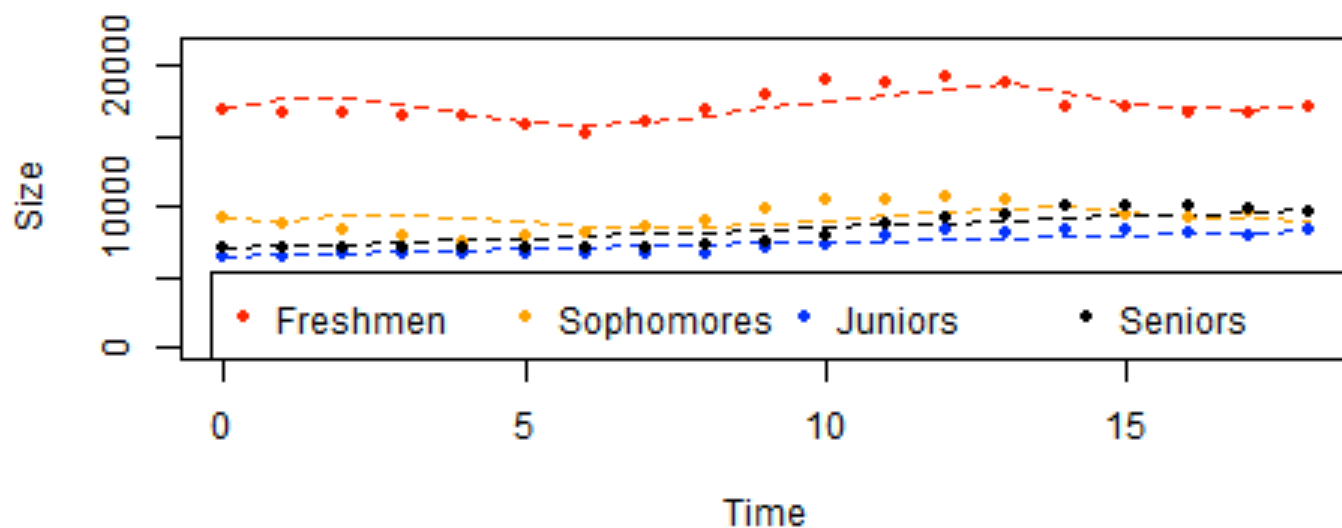
Alaska Model 2 Groups



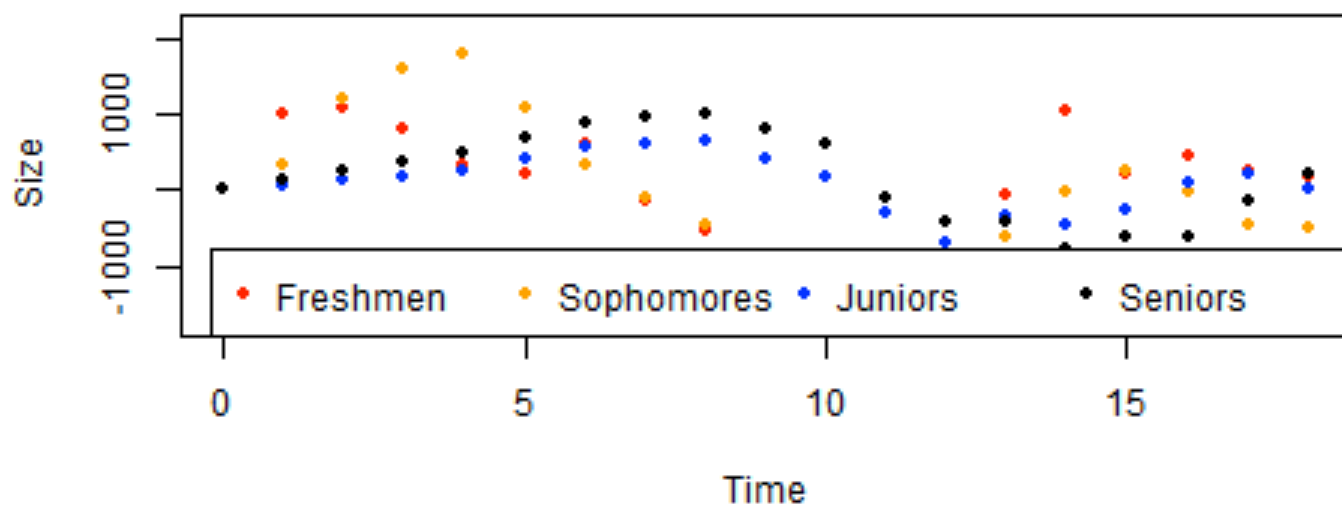
Alaska Model 2 Residuals



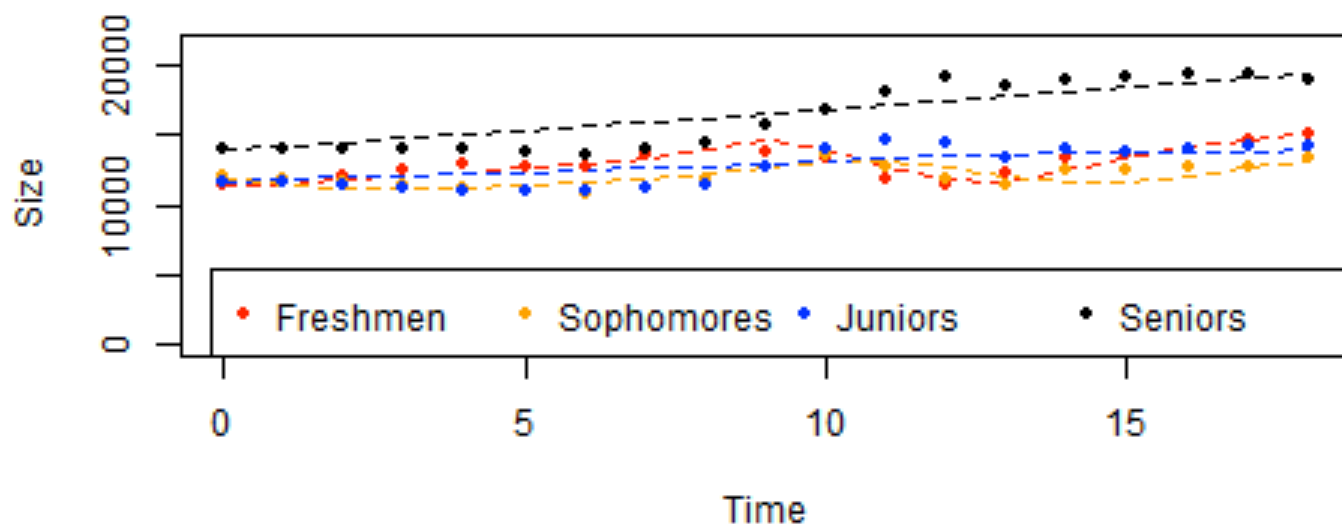
Arizona Model 2 Groups



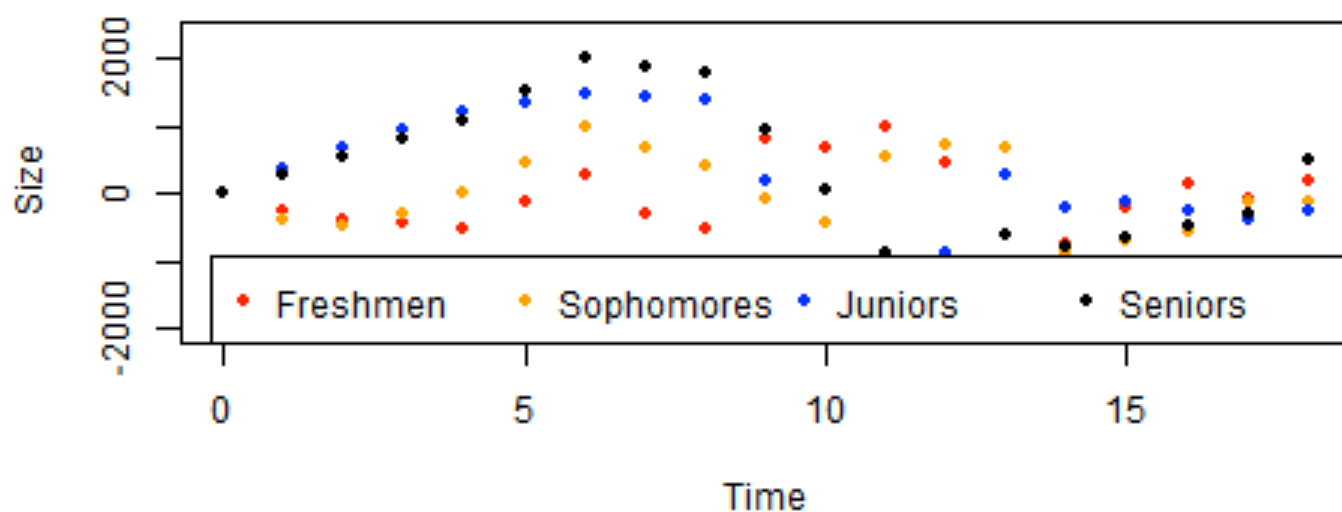
Arizona Model 2 Residuals



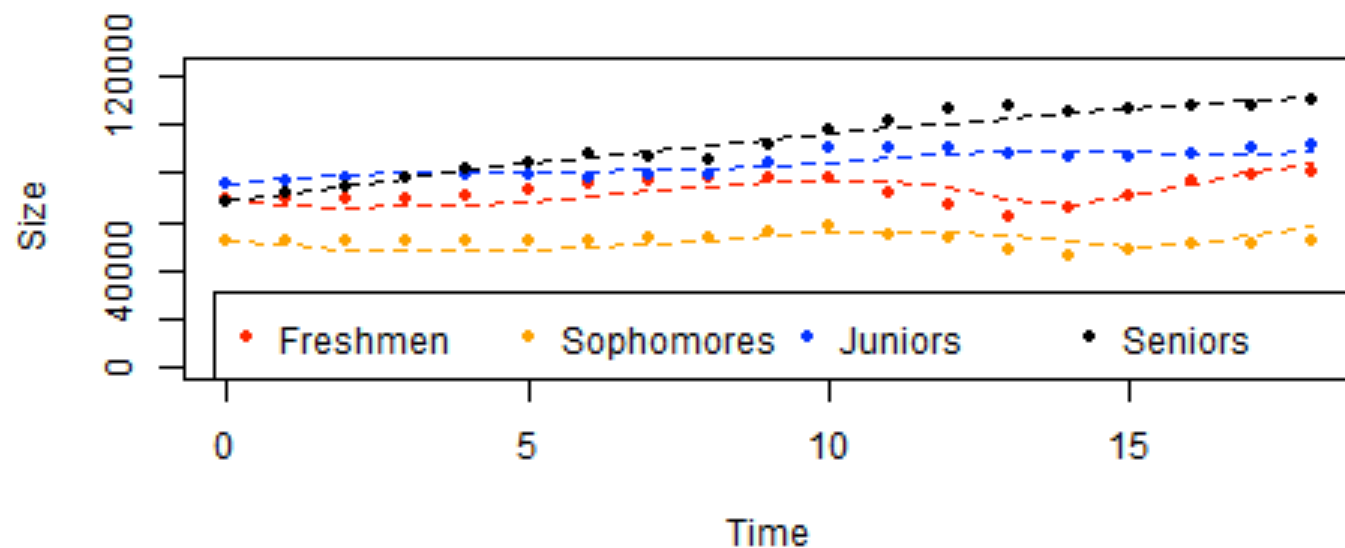
Arkansas Model 2 Groups



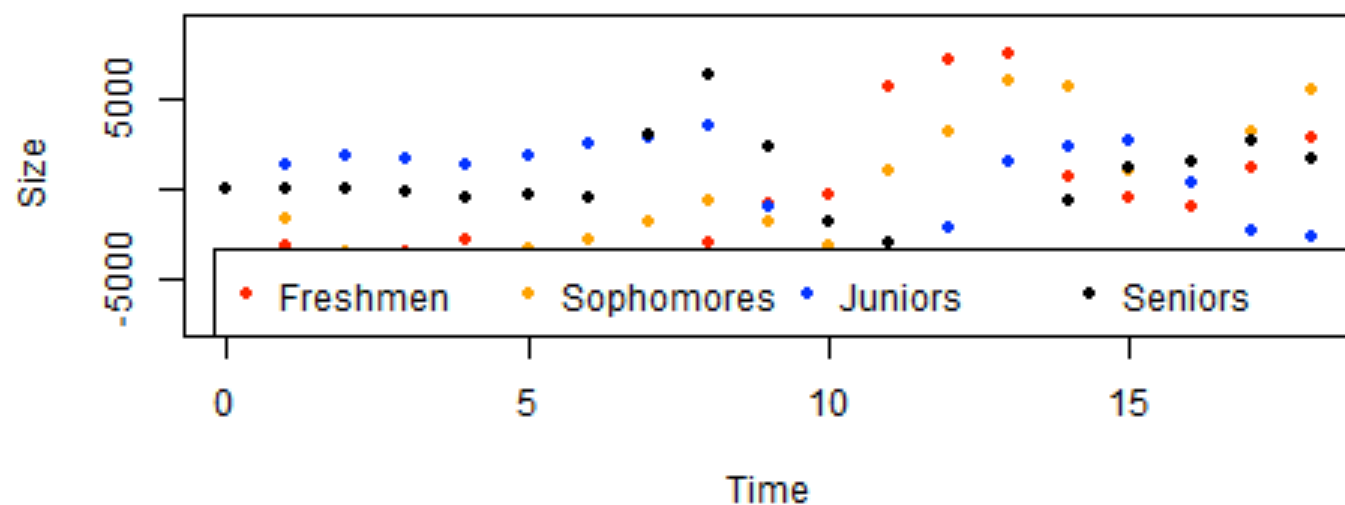
Arkansas Model 2 Residuals



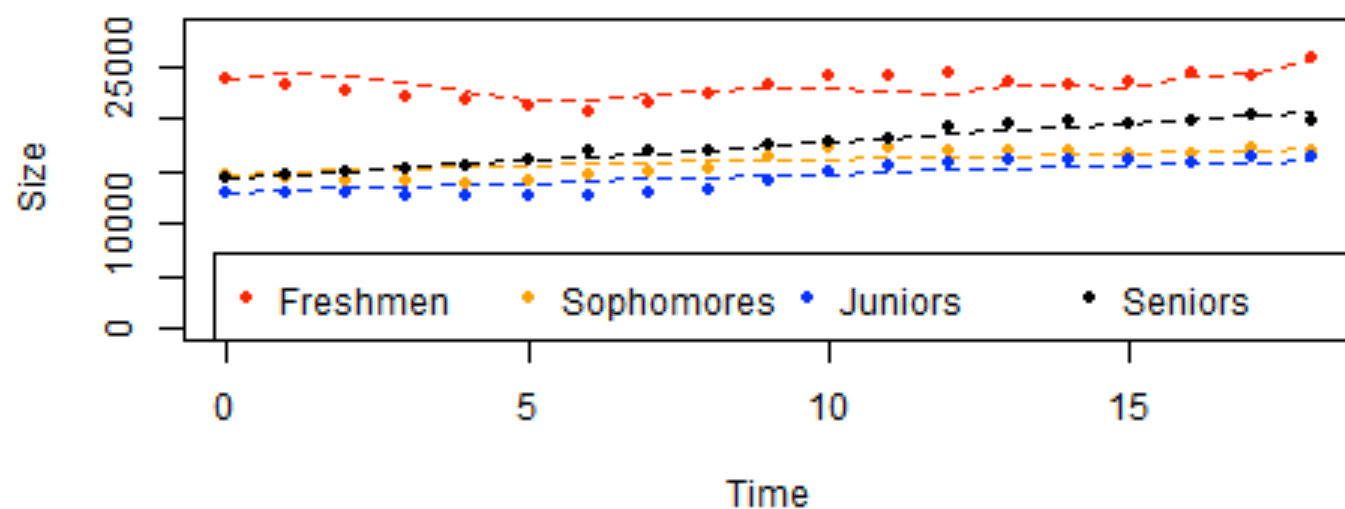
California Model 2 Groups



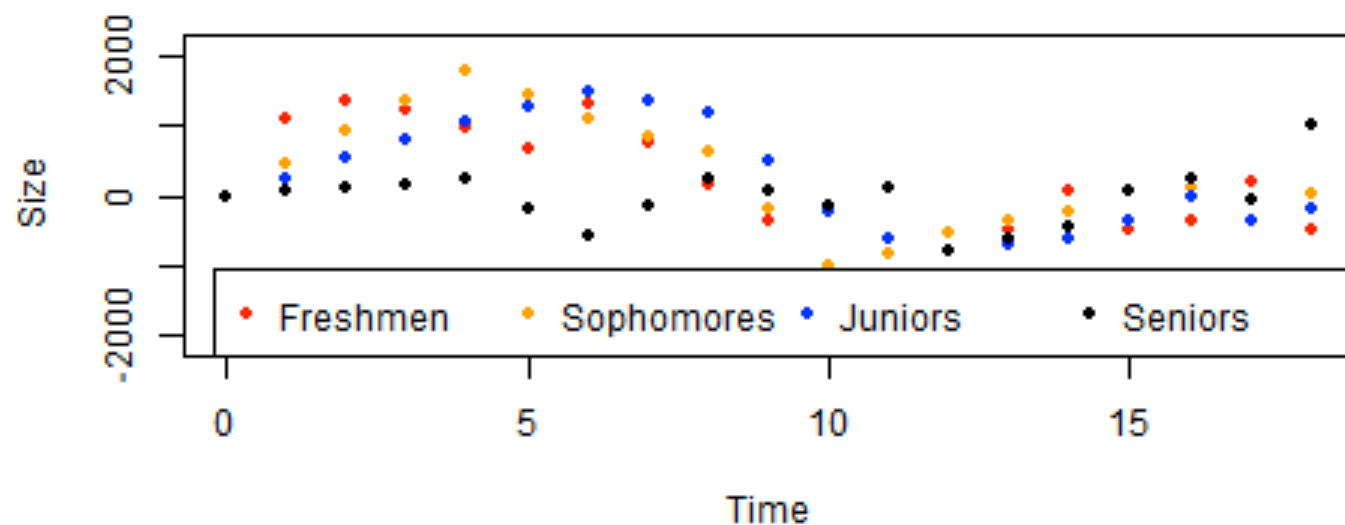
California Model 2 Residuals



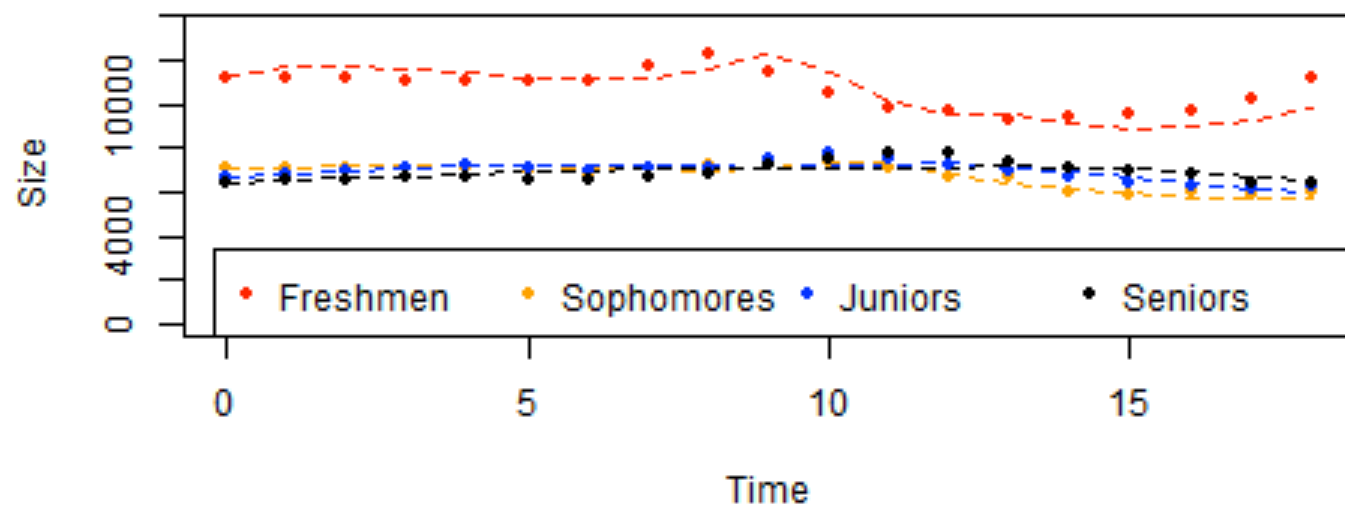
Colorado Model 2 Groups



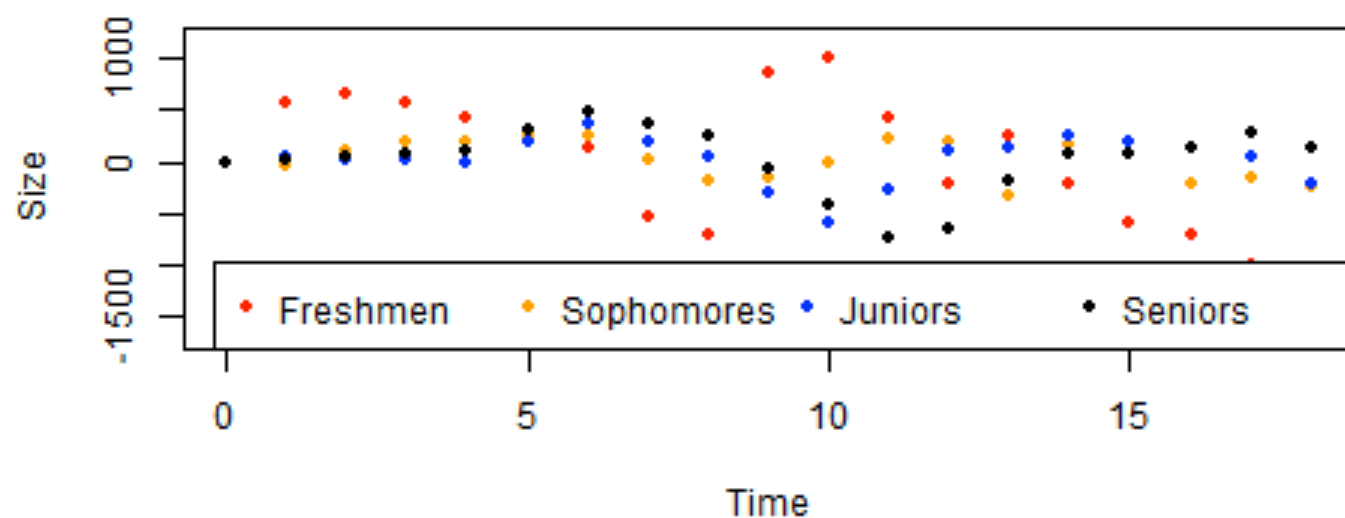
Colorado Model 2 Residuals



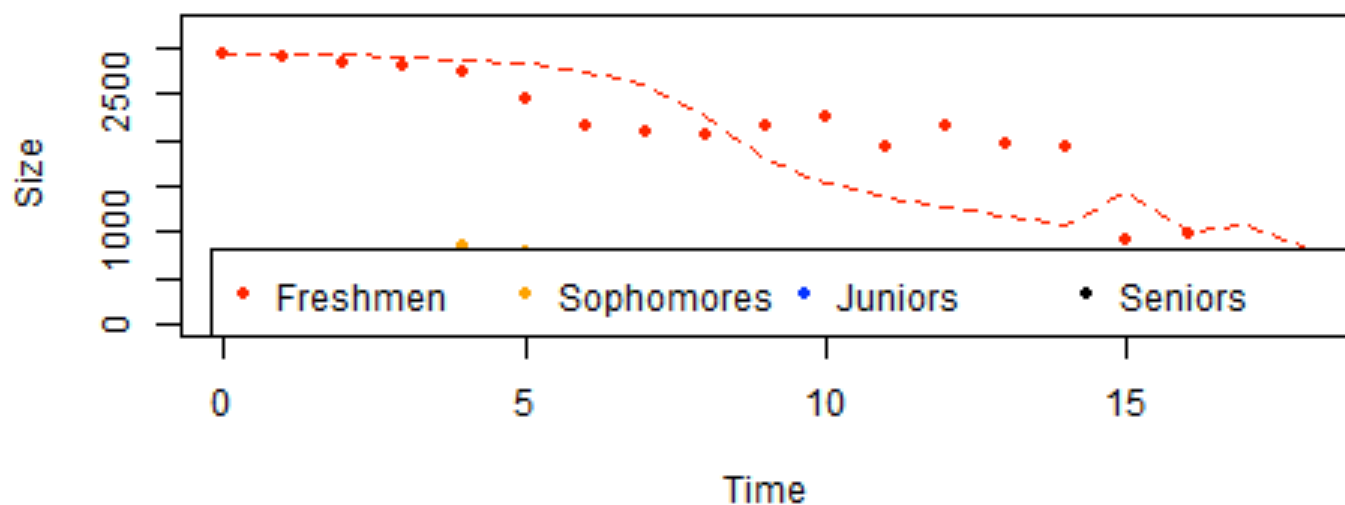
Connecticut Model 2 Groups



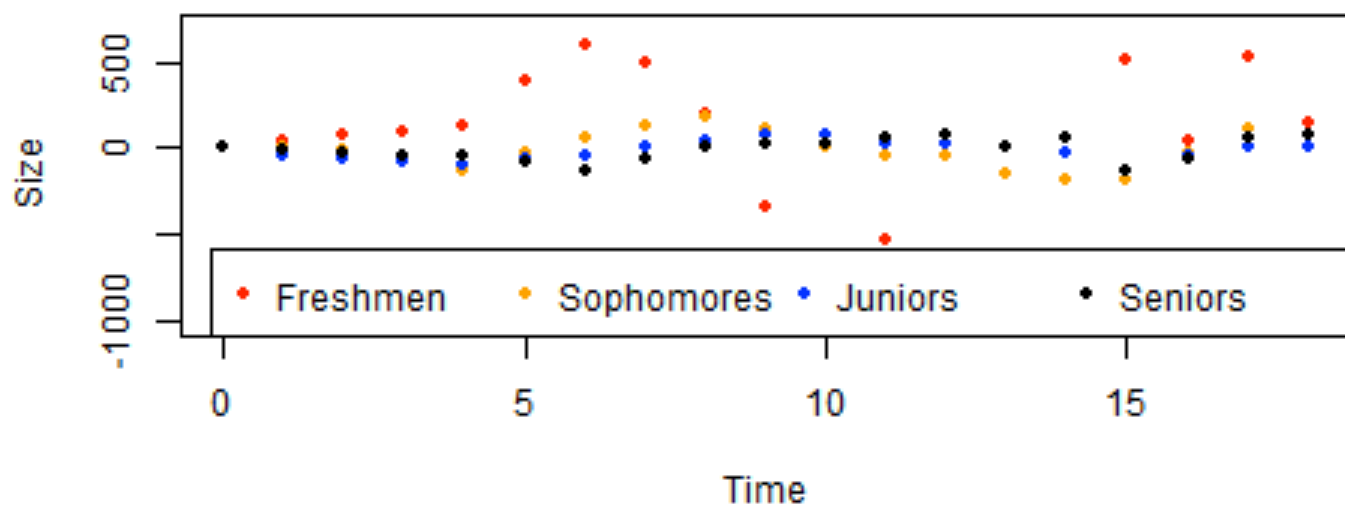
Connecticut Model 2 Residuals



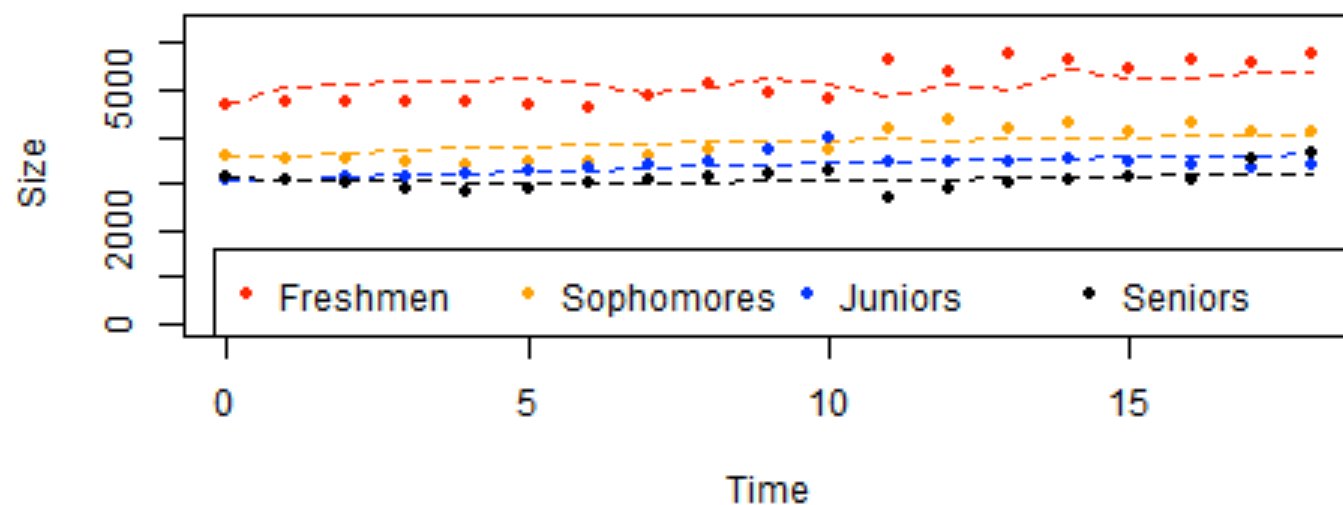
Delaware Model 2 Groups



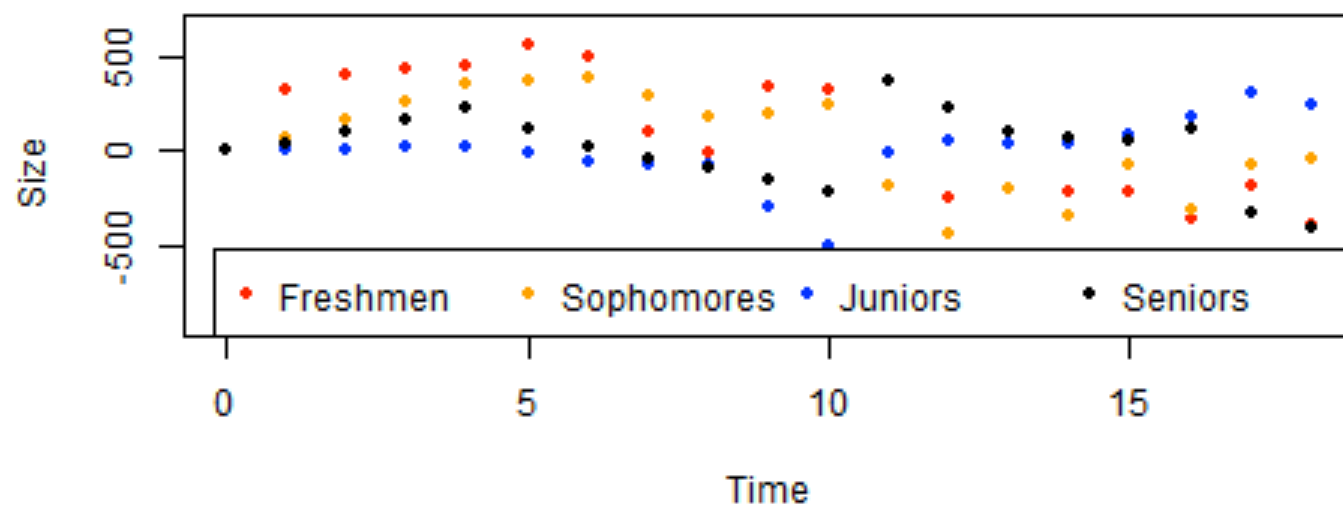
Delaware Model 2 Residuals



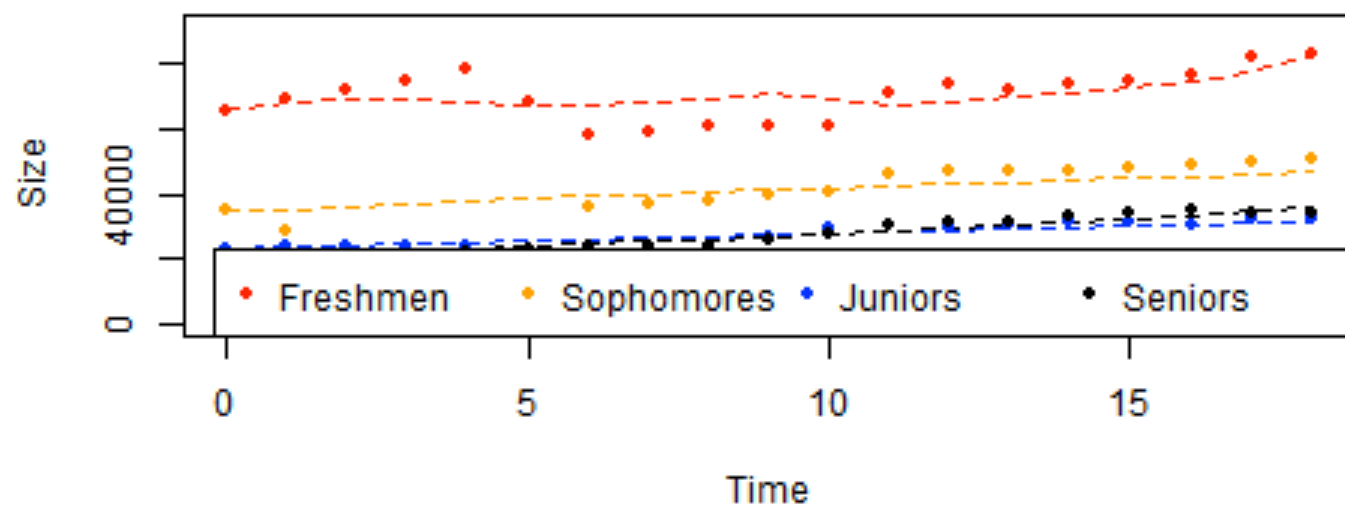
Florida Model 2 Groups



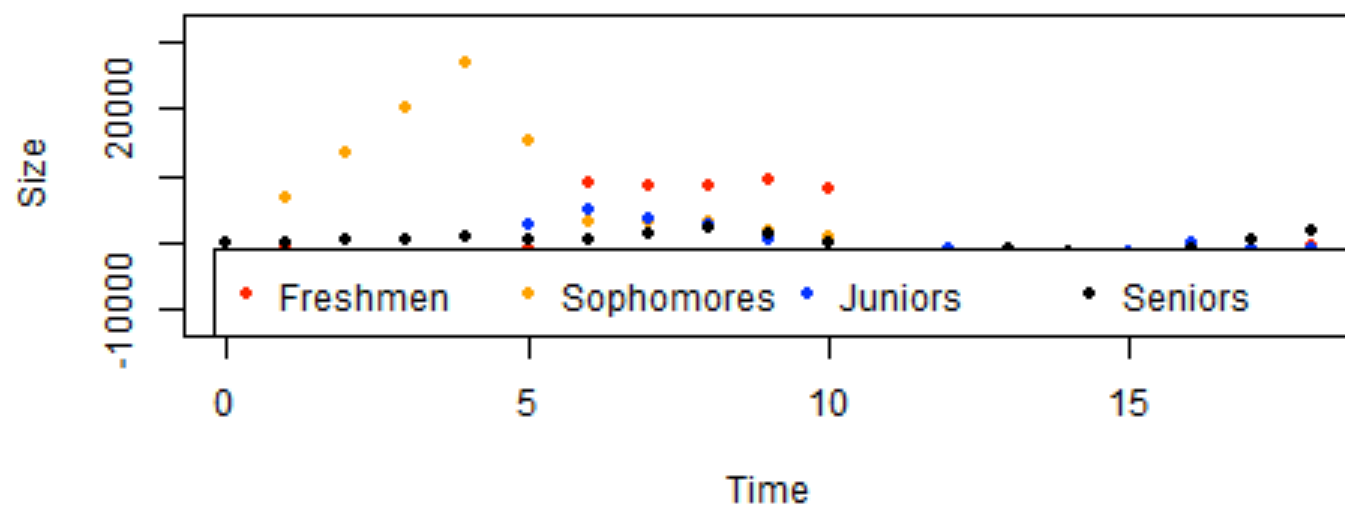
Florida Model 2 Residuals



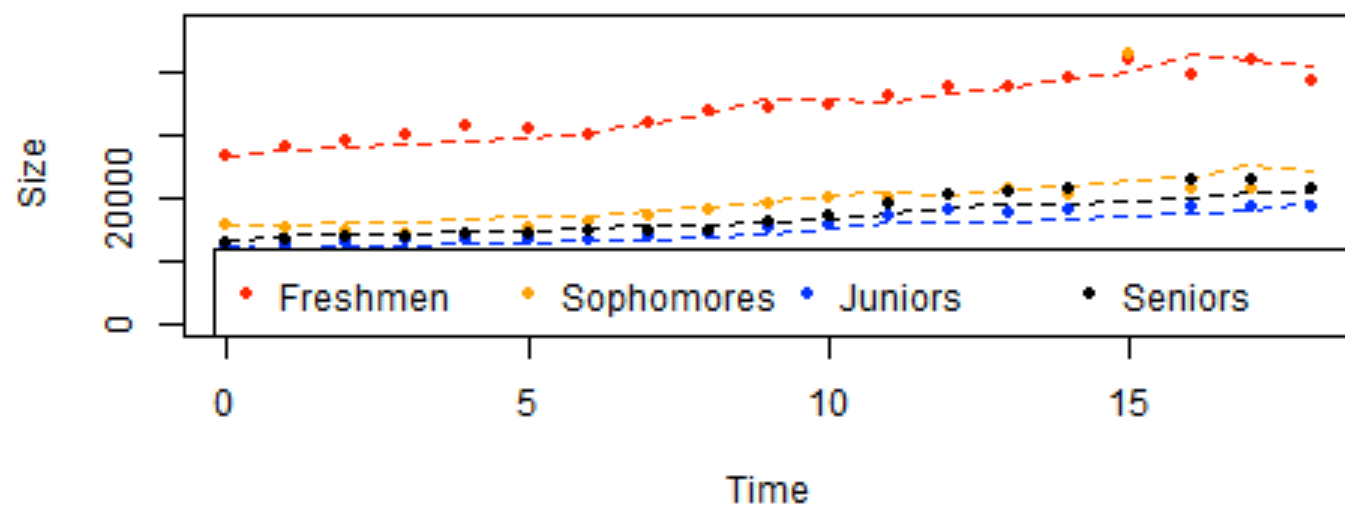
Georgia Model 2 Groups



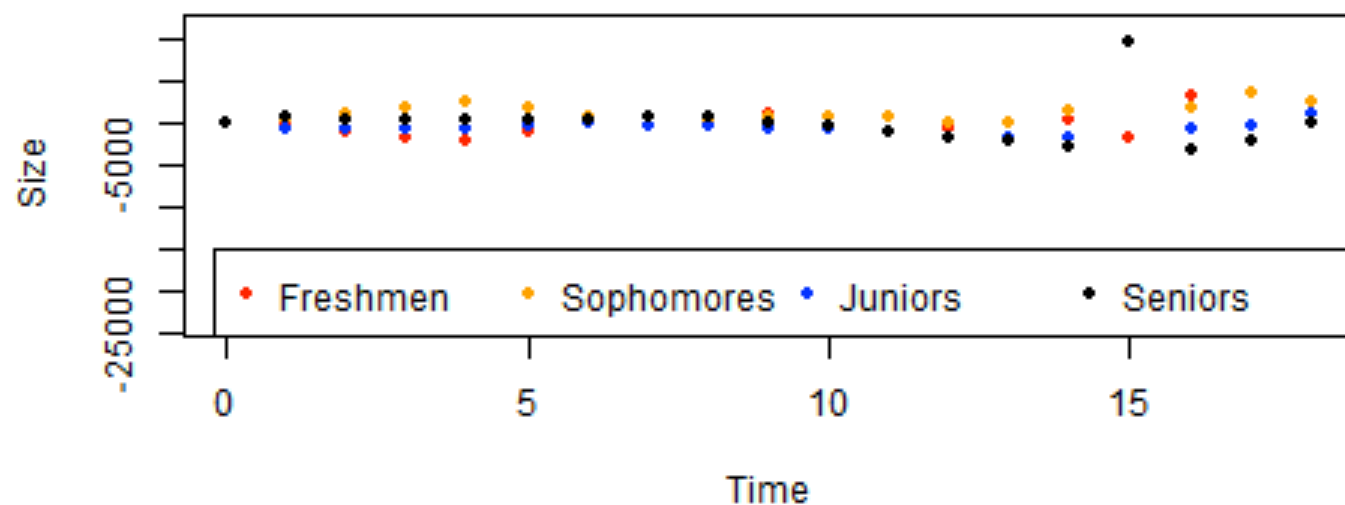
Georgia Model 2 Residuals



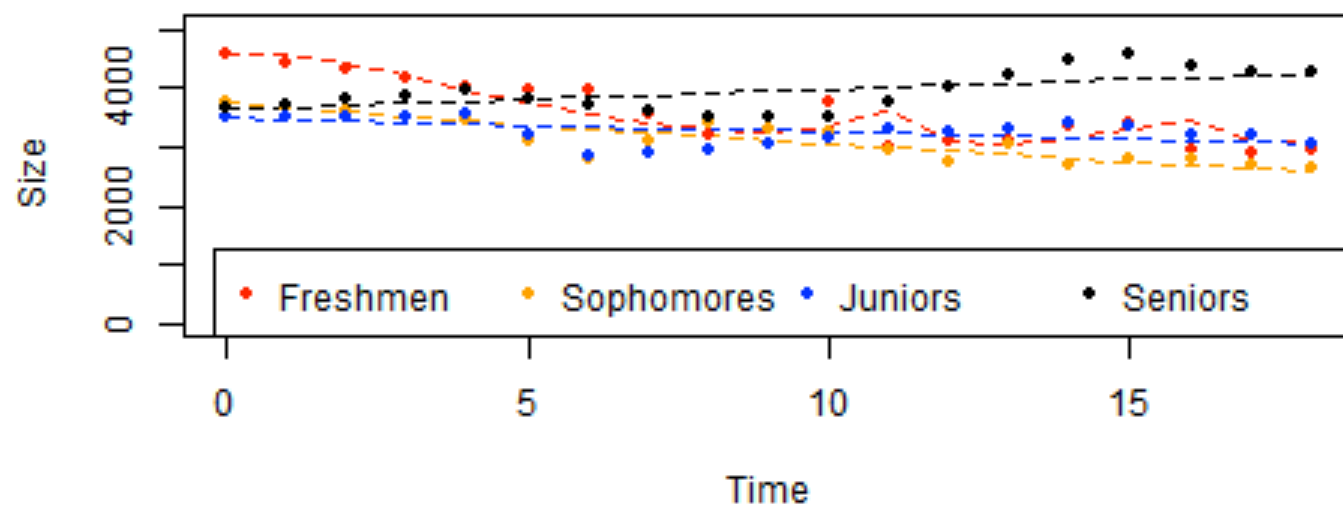
Hawaii Model 2 Groups



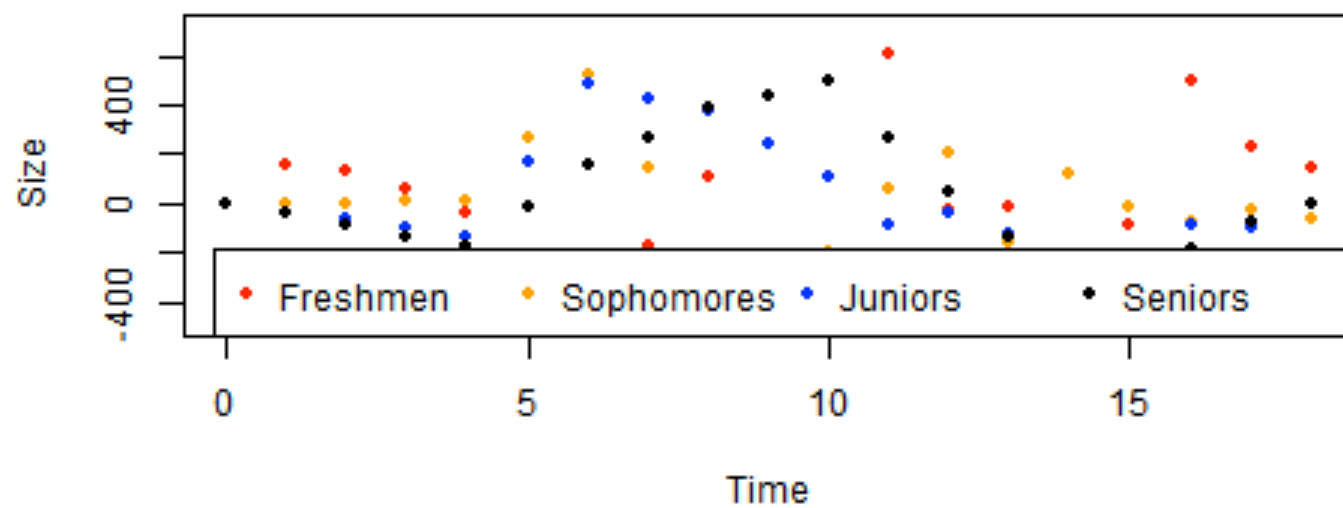
Hawaii Model 2 Residuals



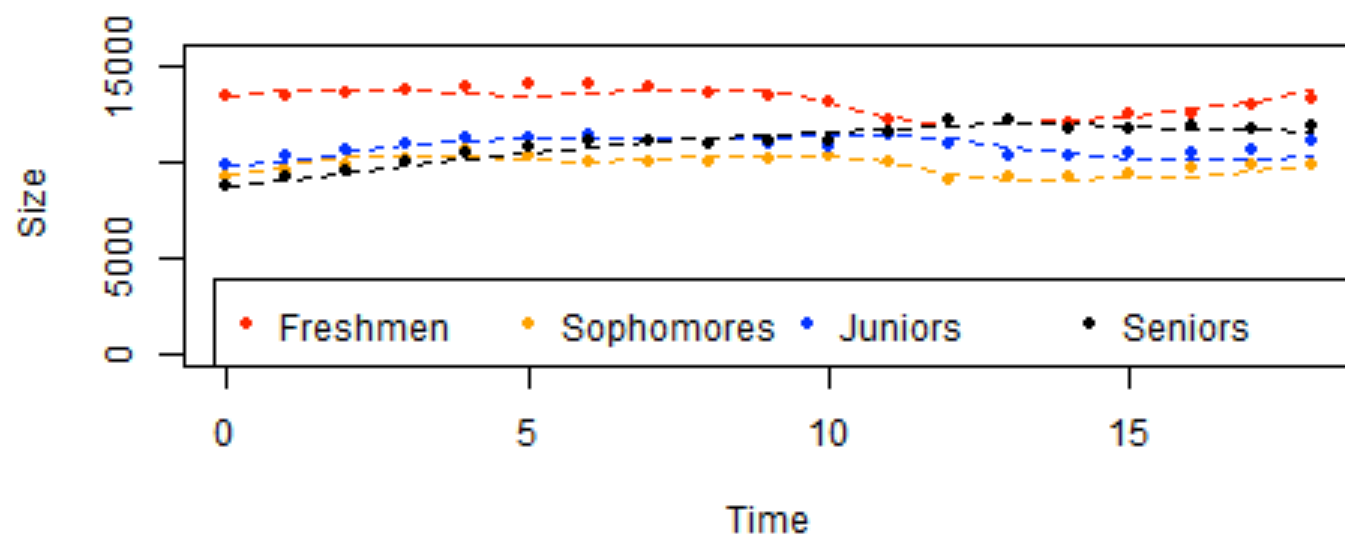
Idaho Model 2 Groups



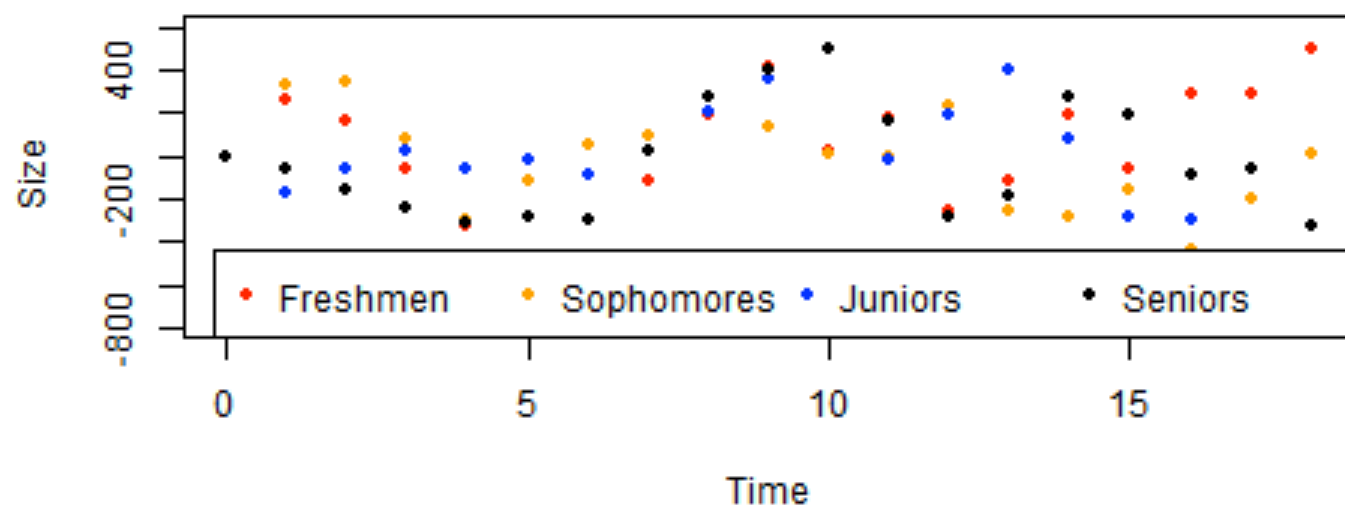
Idaho Model 2 Residuals



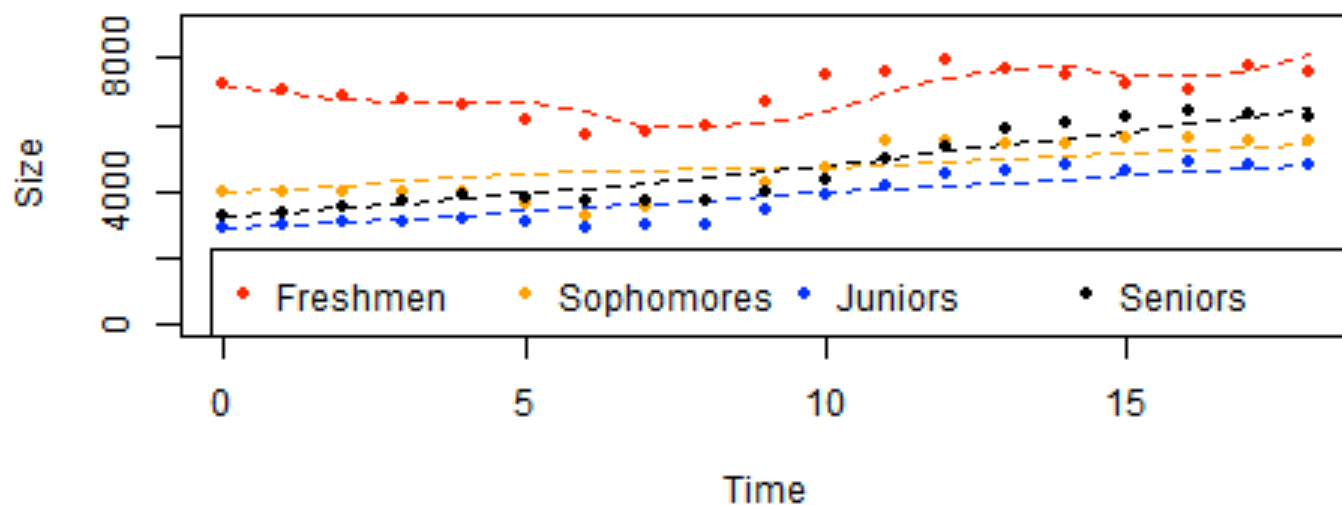
Illinois Model 2 Groups



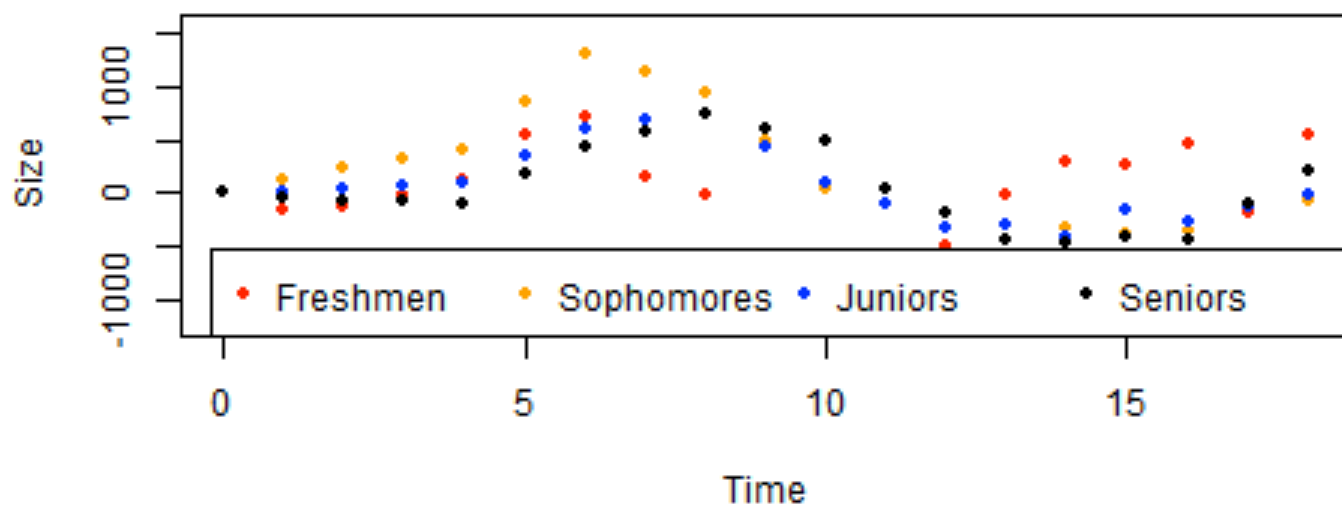
Illinois Model 2 Residuals



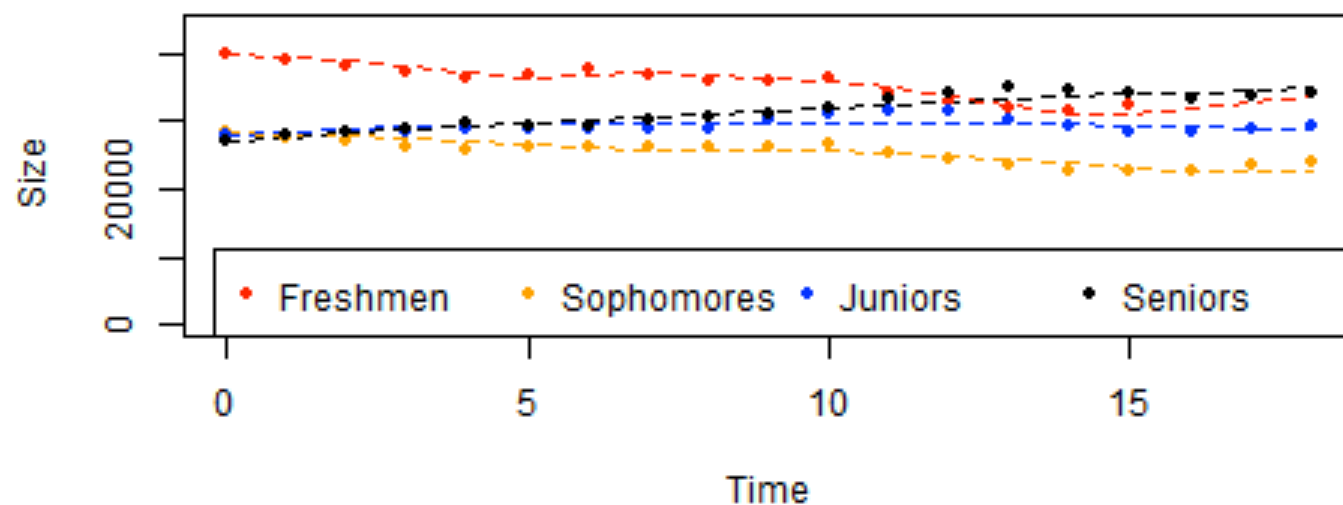
Indiana Model 2 Groups



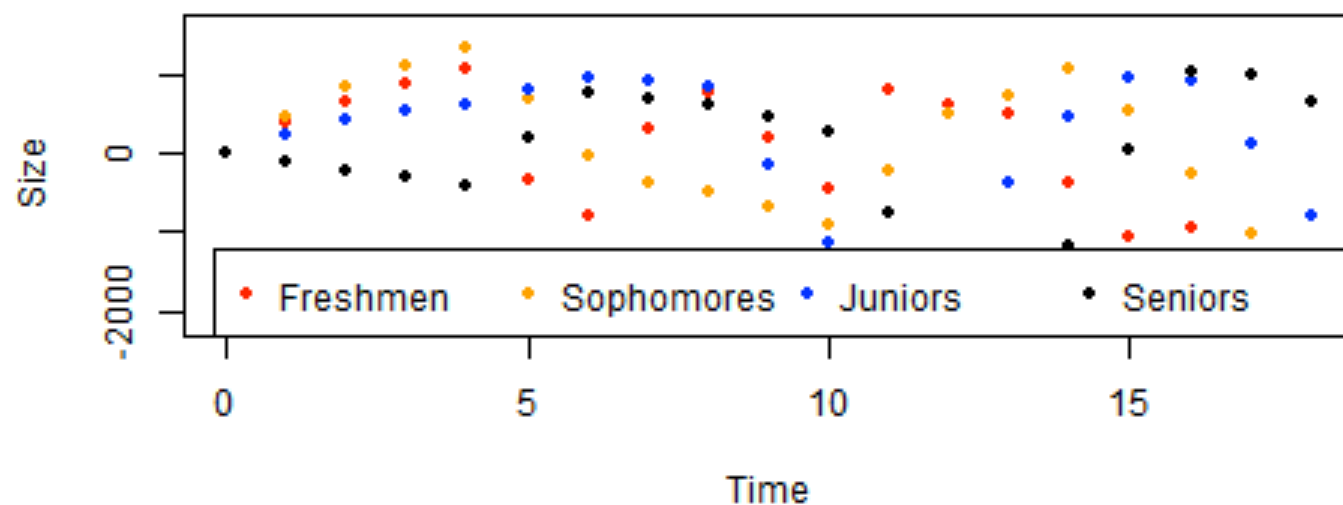
Indiana Model 2 Residuals



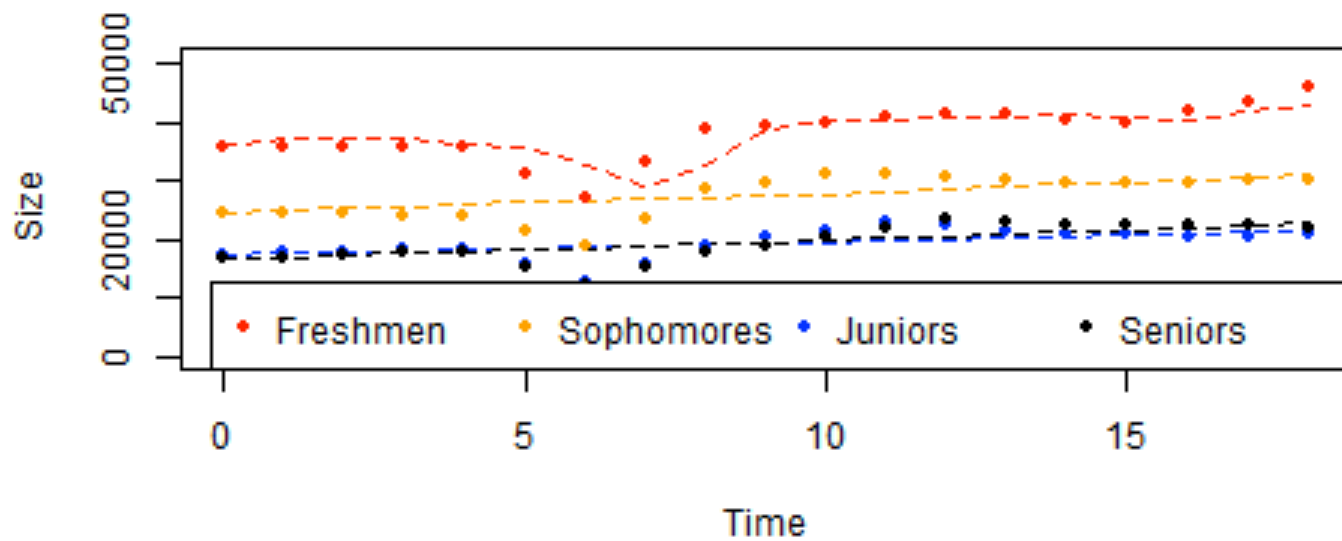
Iowa Model 2 Groups



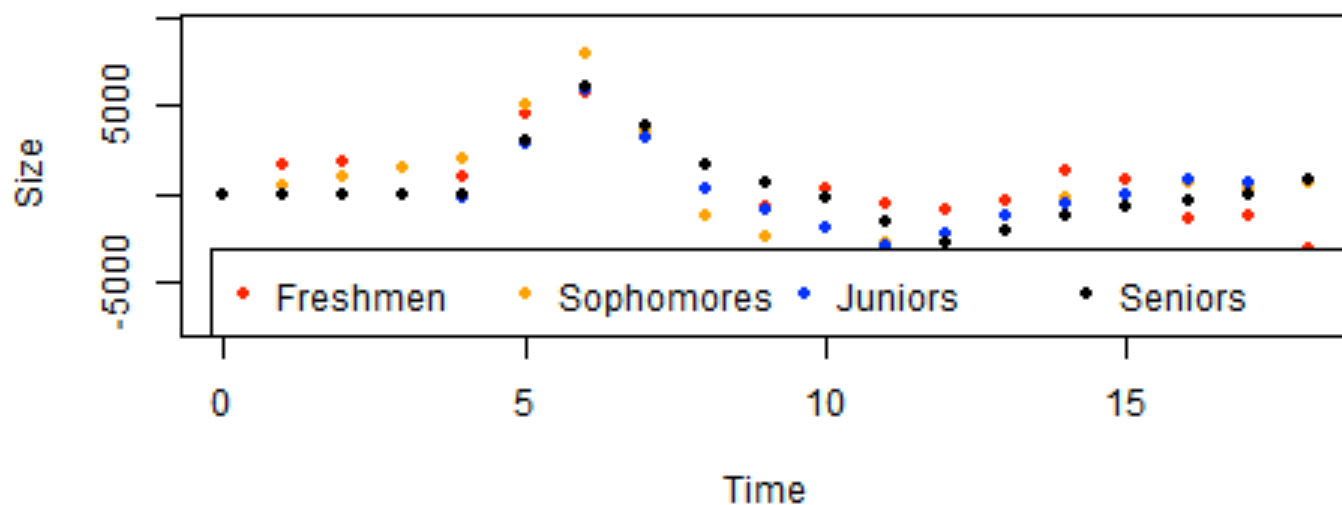
Iowa Model 2 Residuals



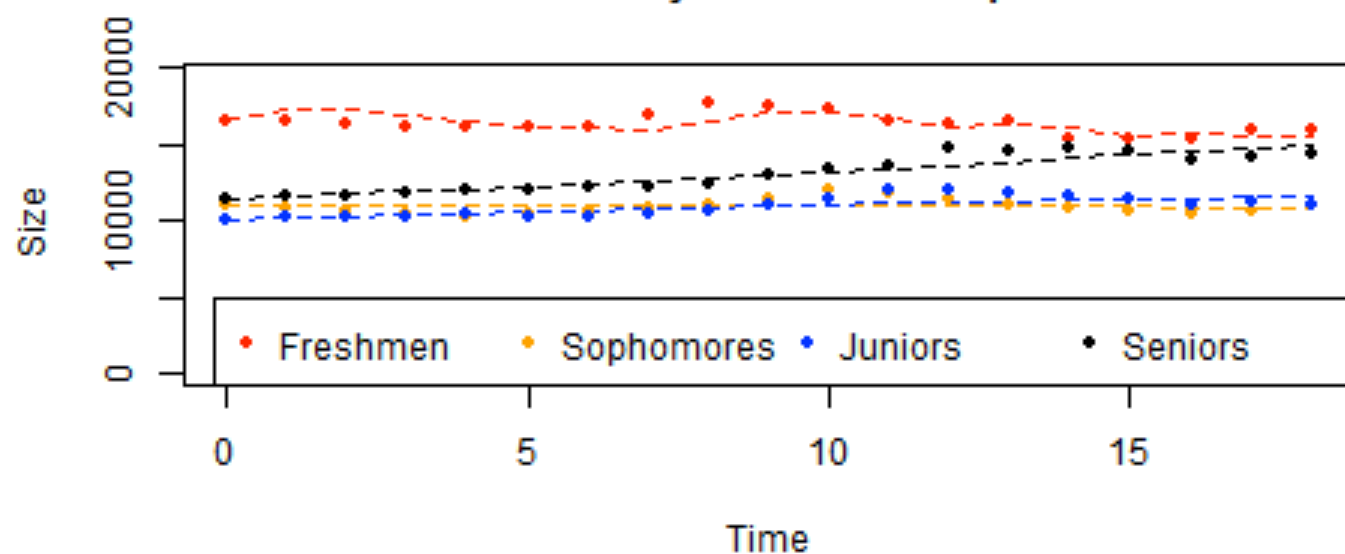
Kansas Model 2 Groups



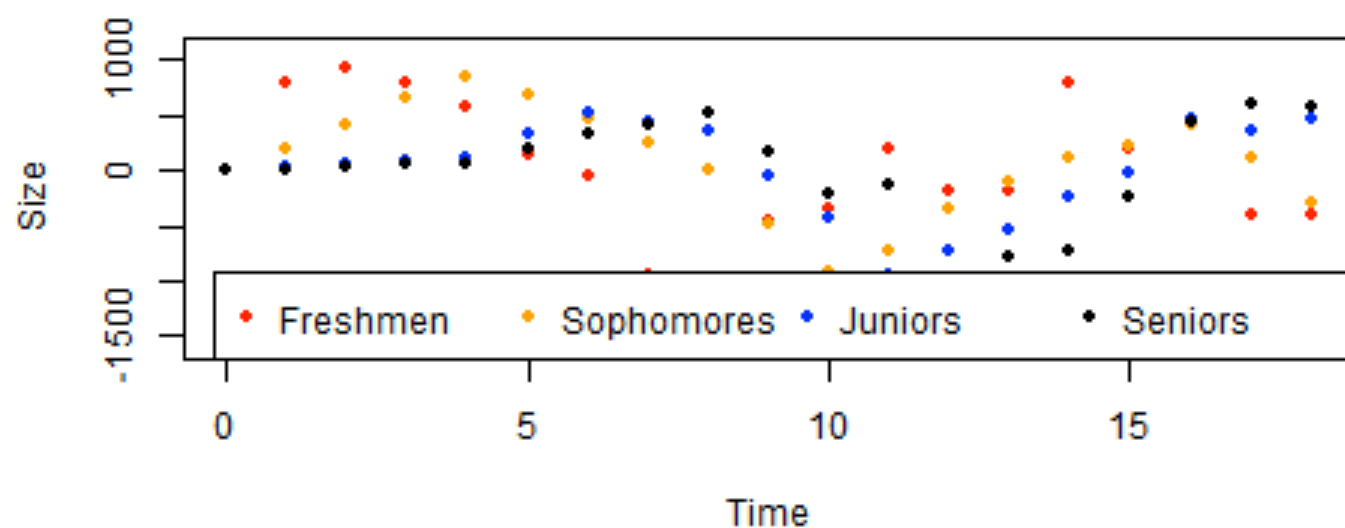
Kansas Model 2 Residuals



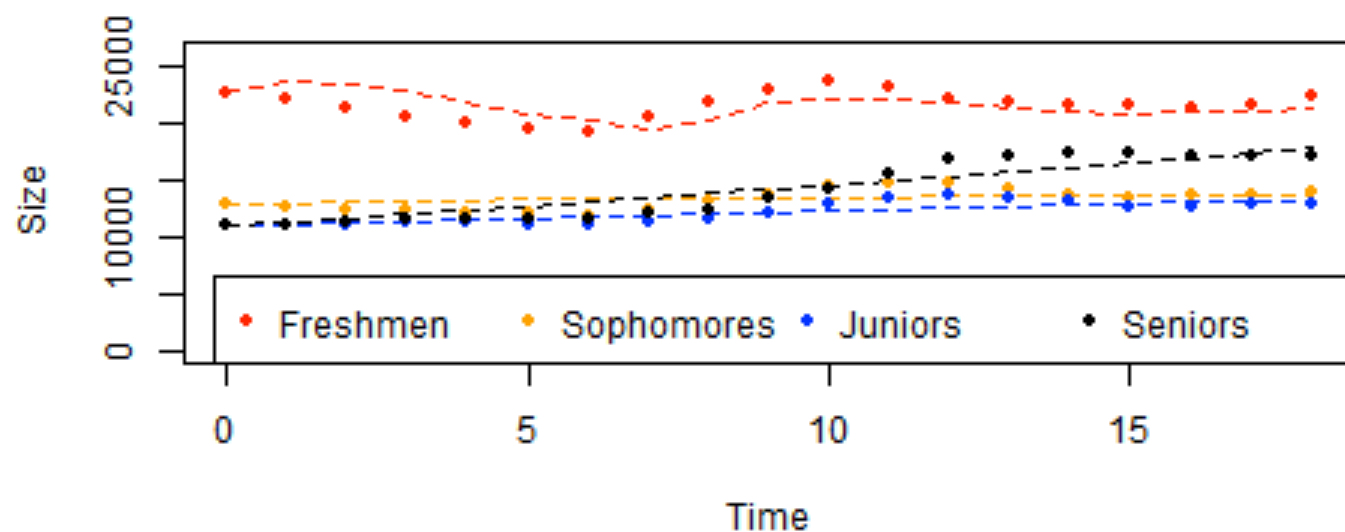
Kentucky Model 2 Groups



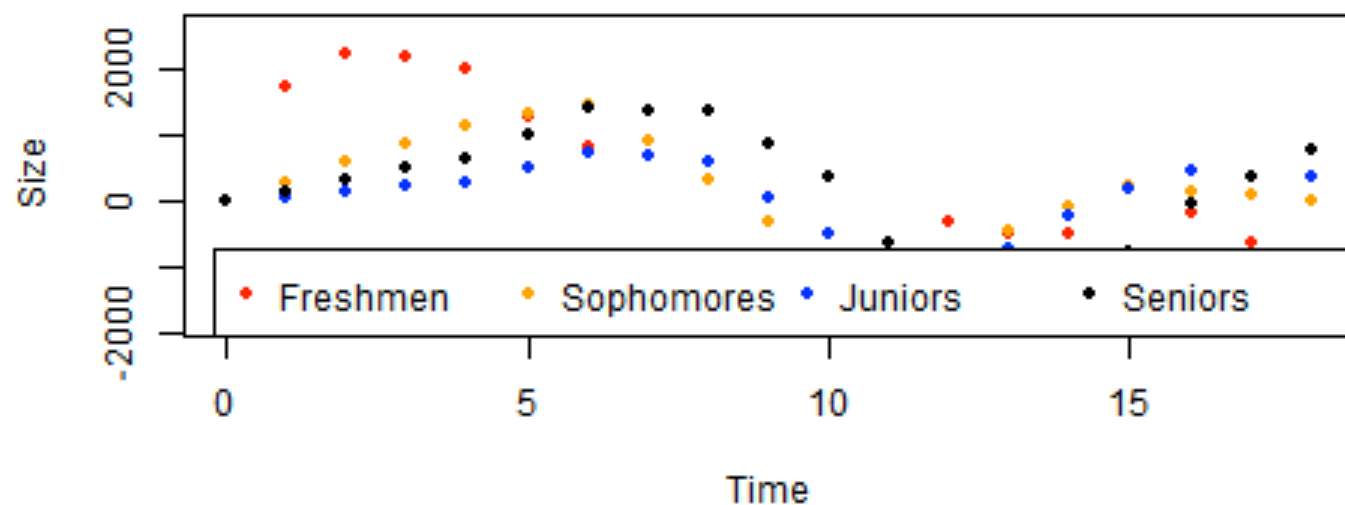
Kentucky Model 2 Residuals



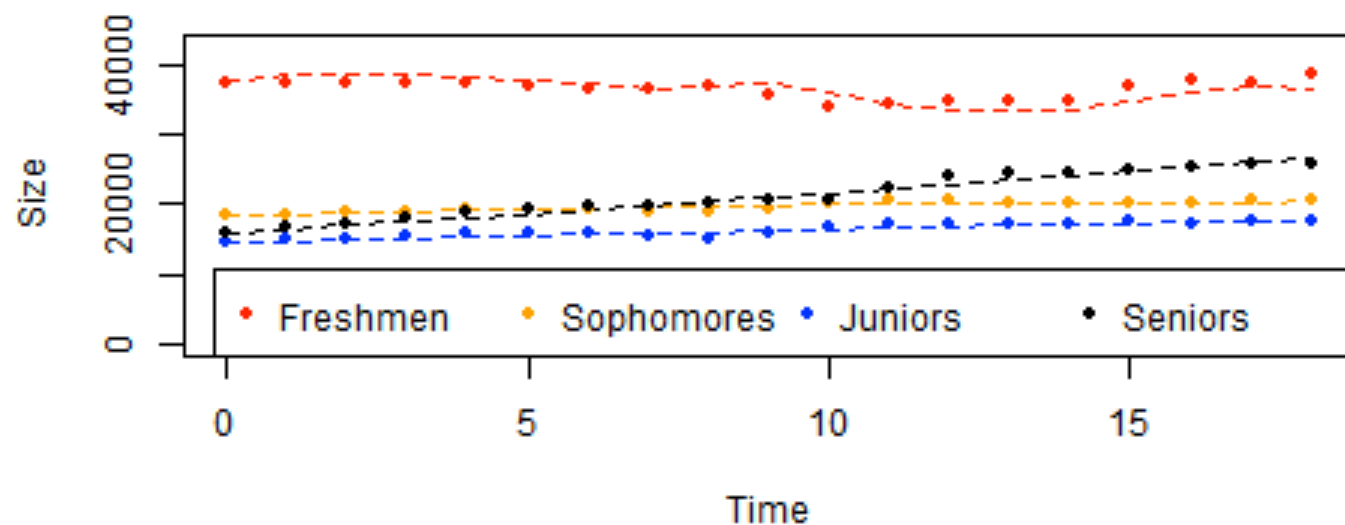
Louisiana Model 2 Groups



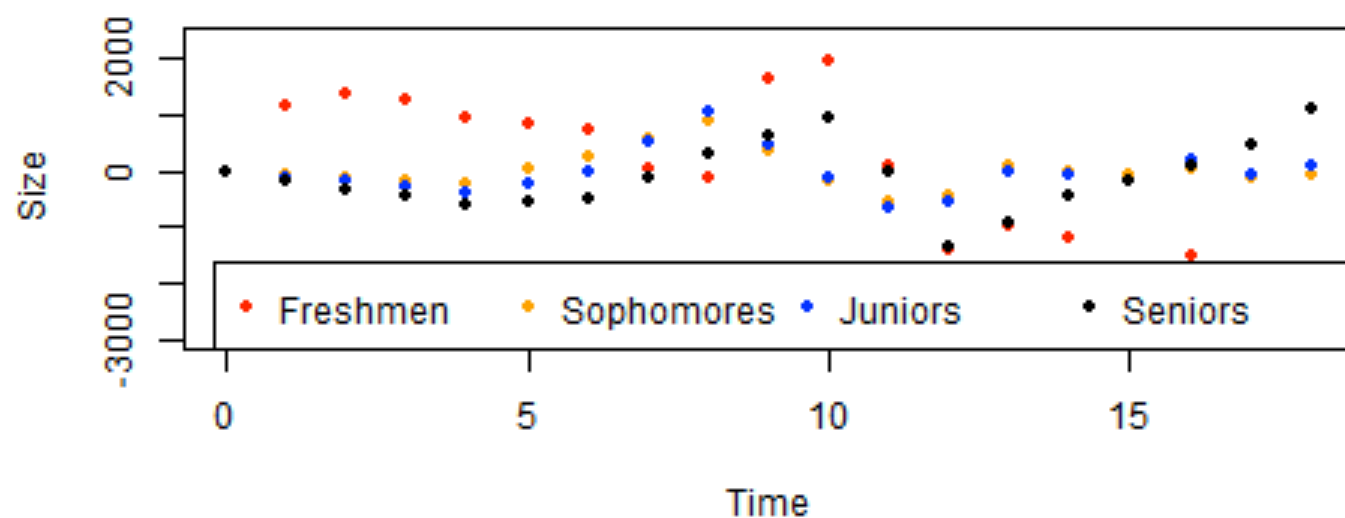
Louisiana Model 2 Residuals



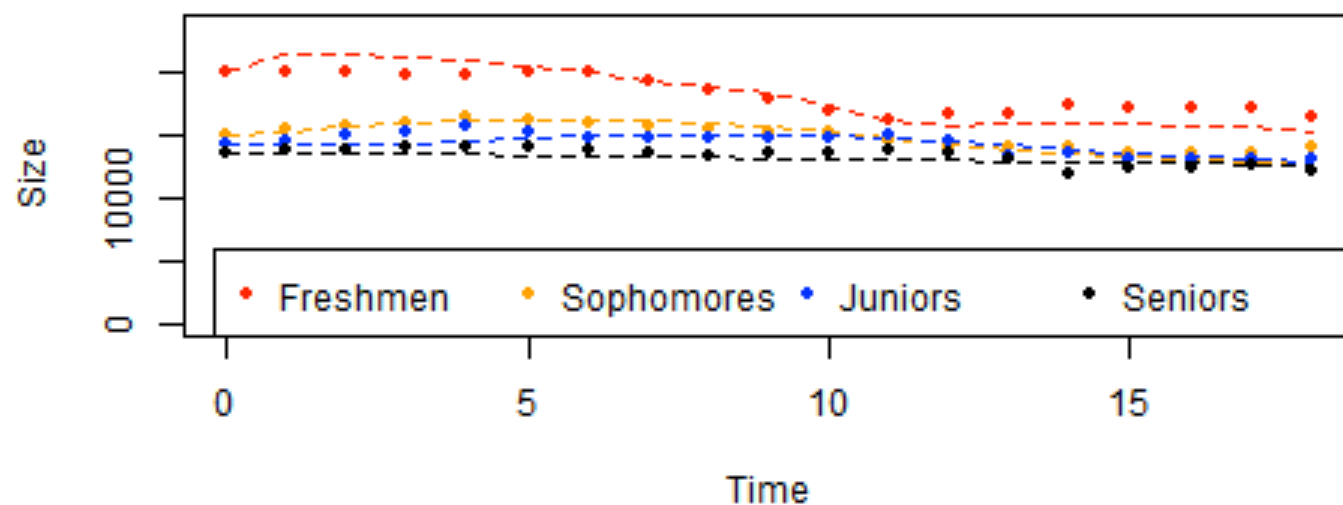
Maine Model 2 Groups



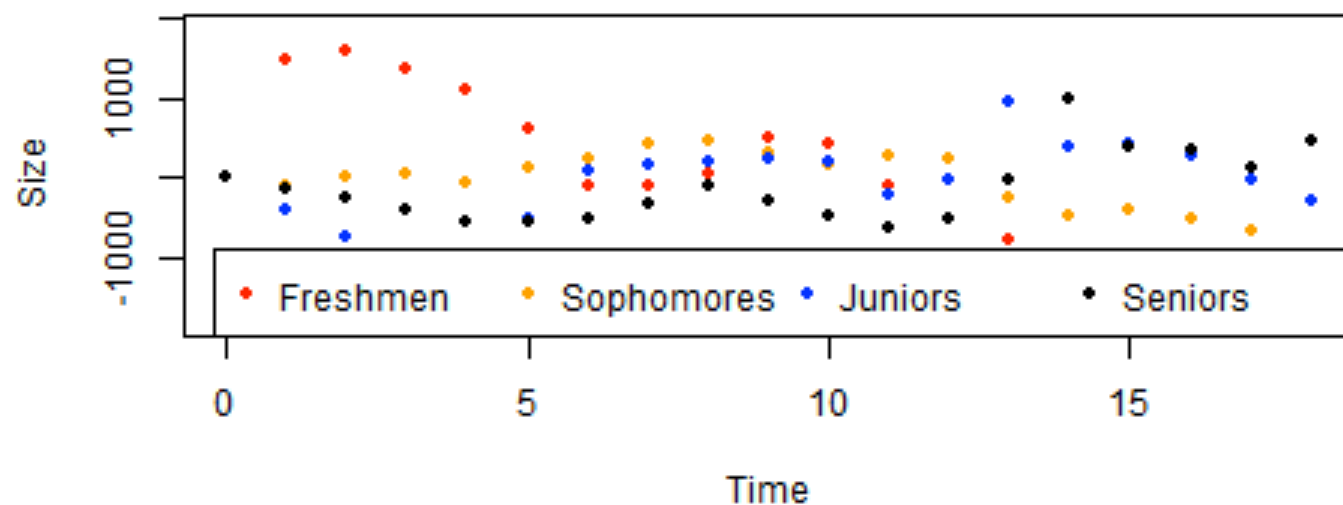
Maine Model 2 Residuals



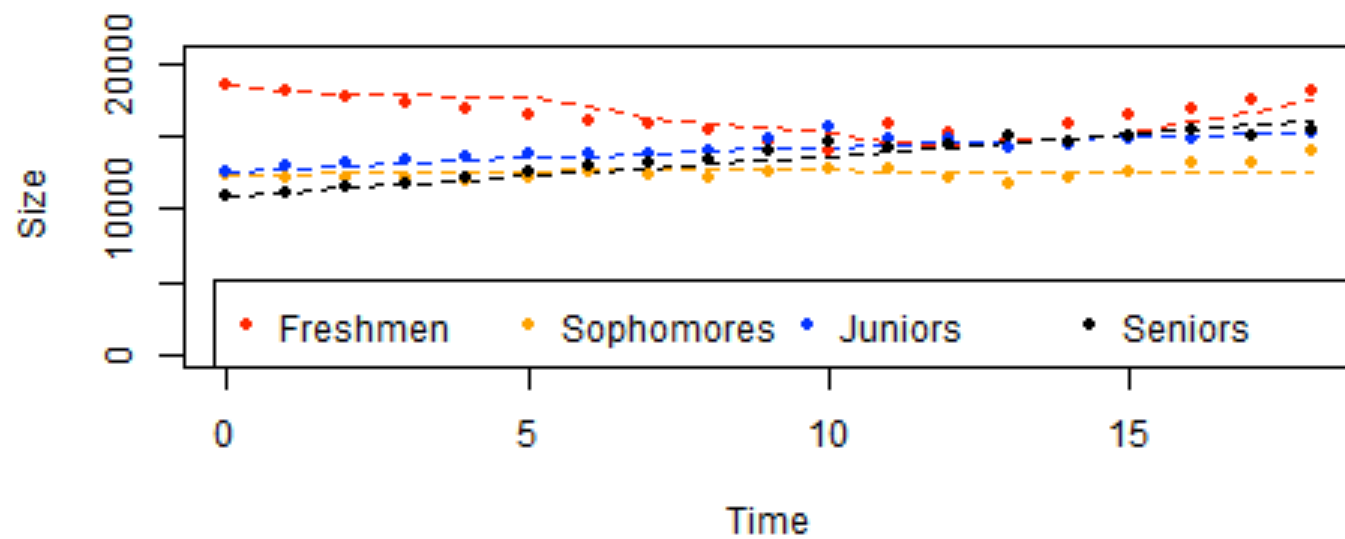
Maryland Model 2 Groups



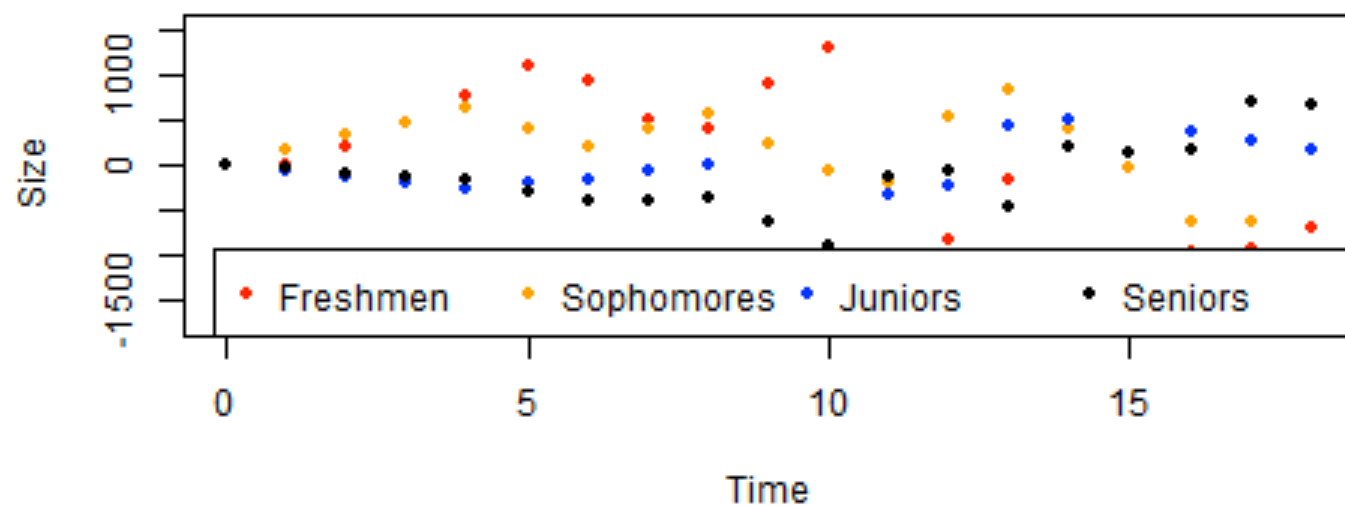
Maryland Model 2 Residuals



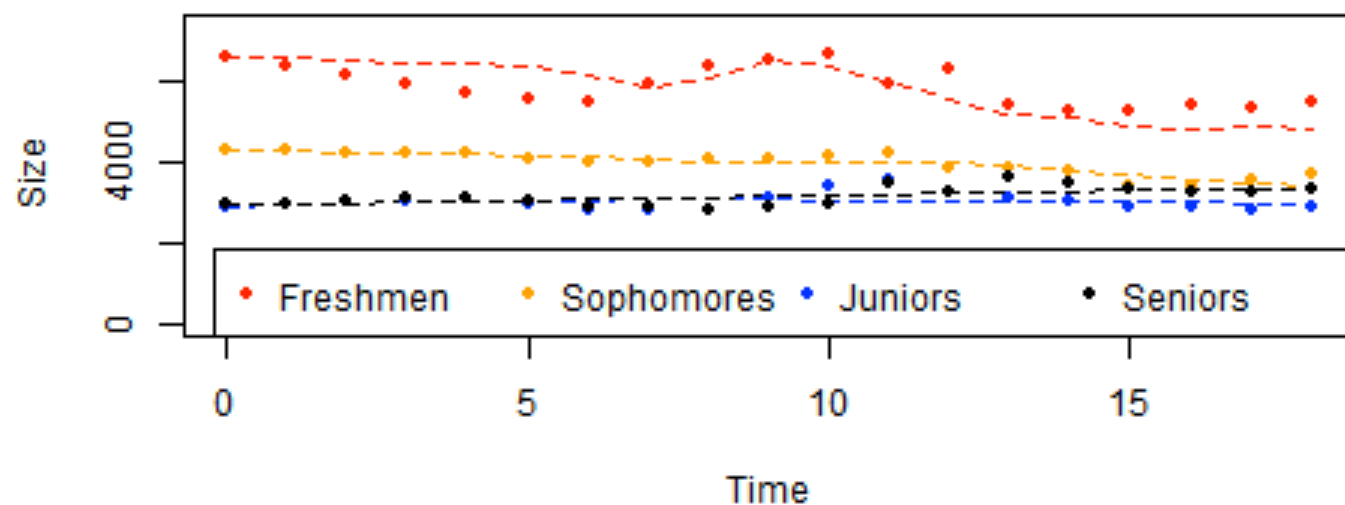
Massachusetts Model 2 Groups



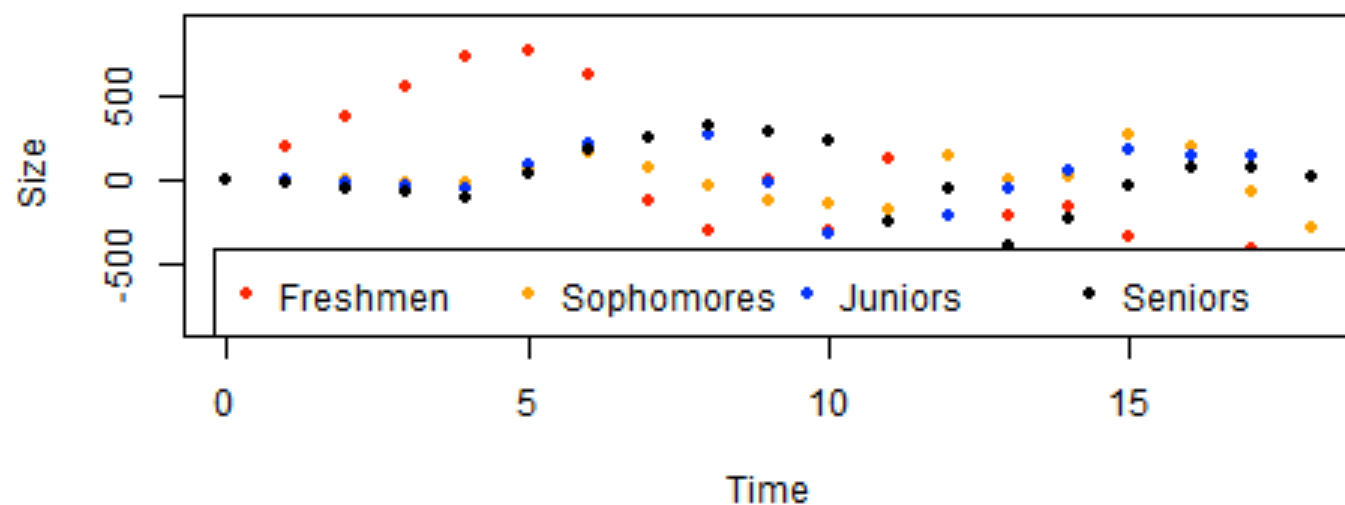
Massachusetts Model 2 Residuals



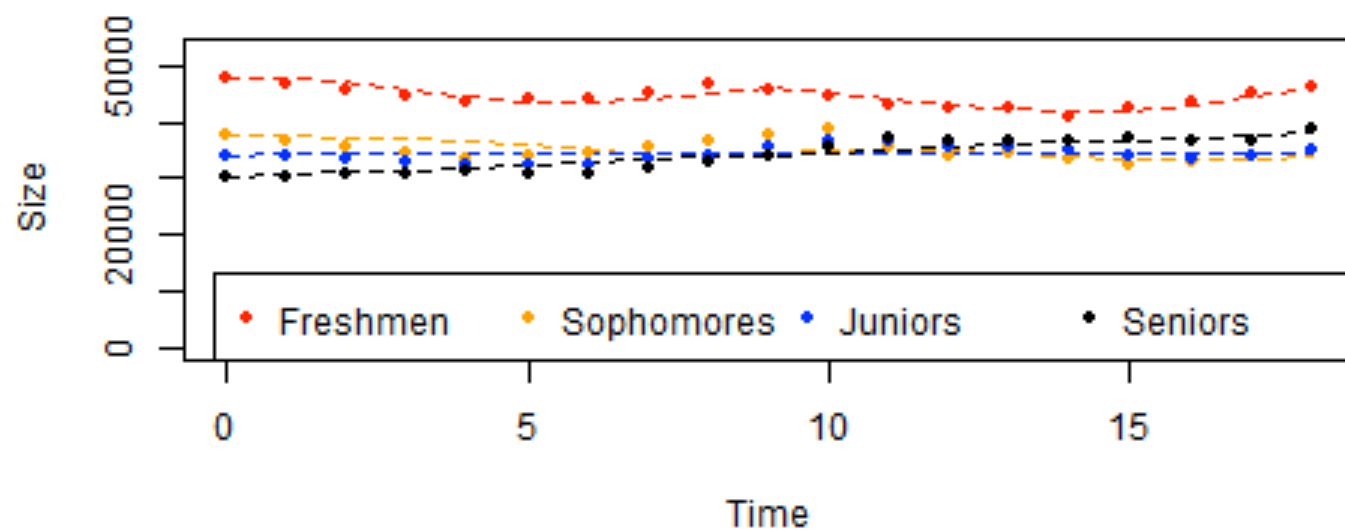
Michigan Model 2 Groups



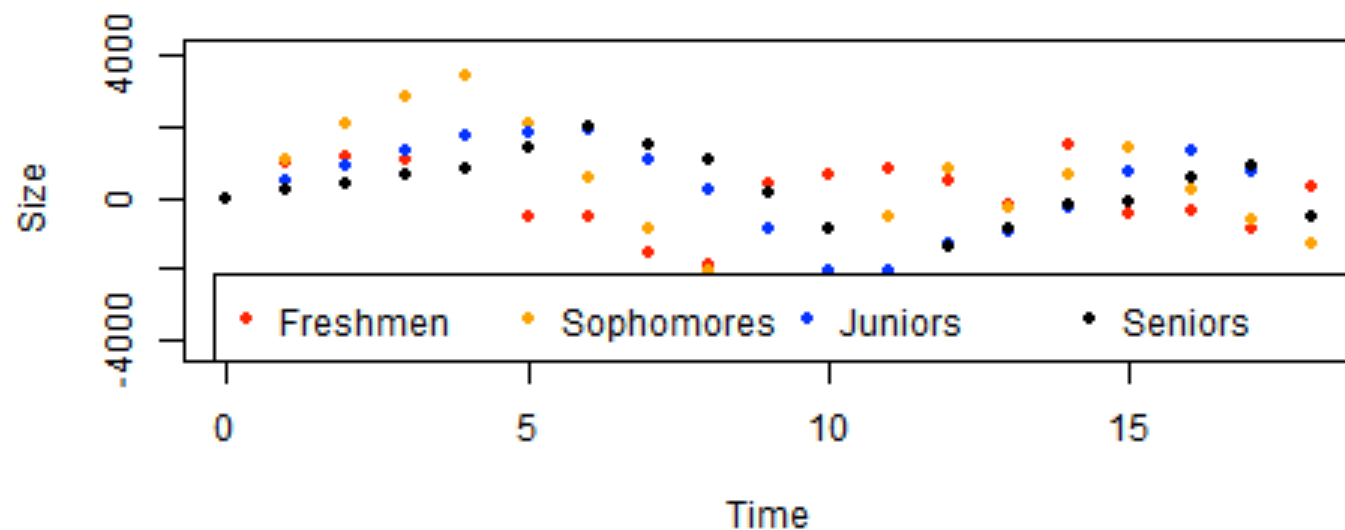
Michigan Model 2 Residuals



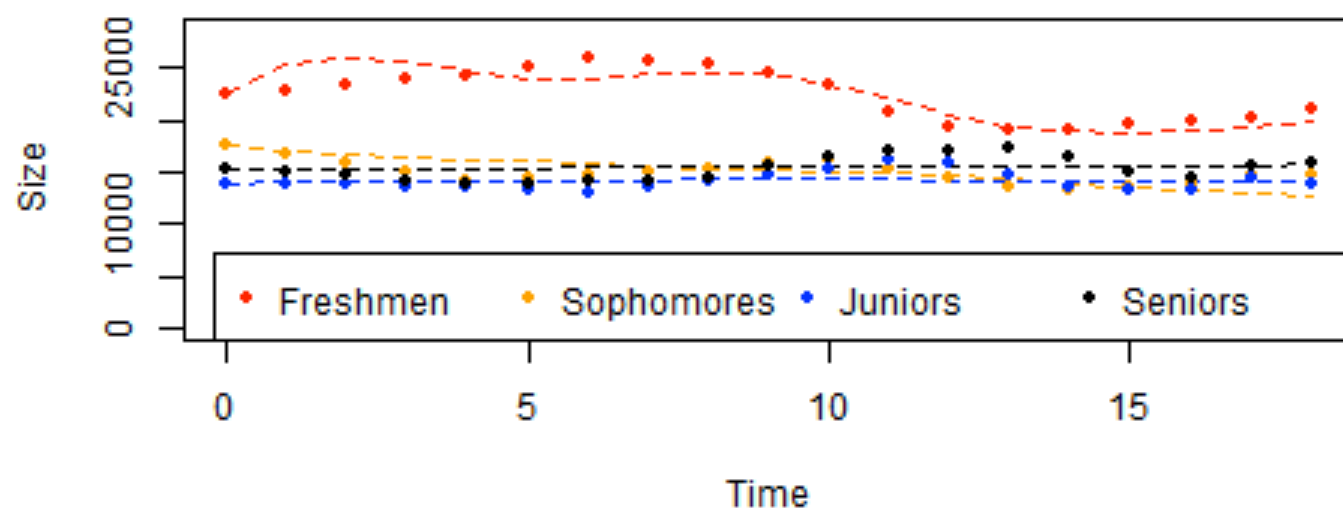
Minnesota Model 2 Groups



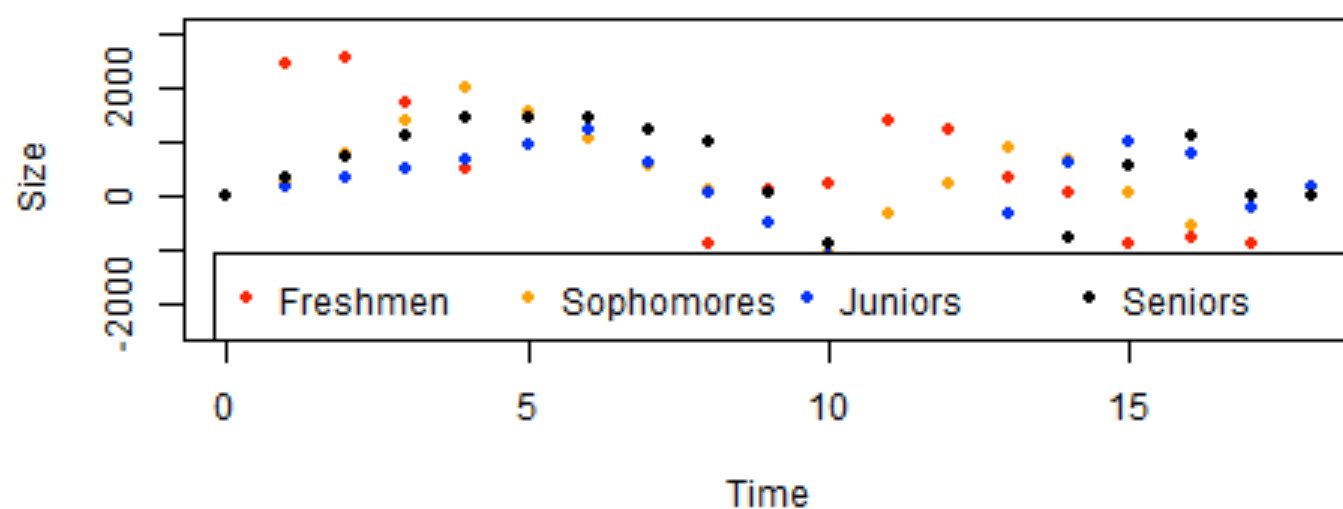
Minnesota Model 2 Residuals



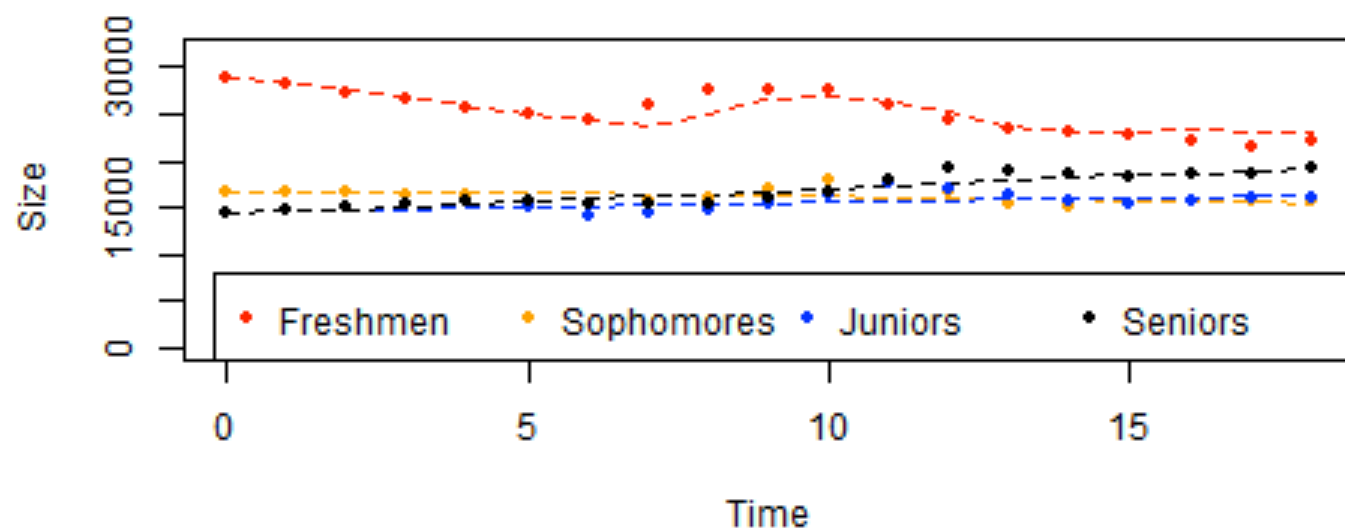
Mississippi Model 2 Groups



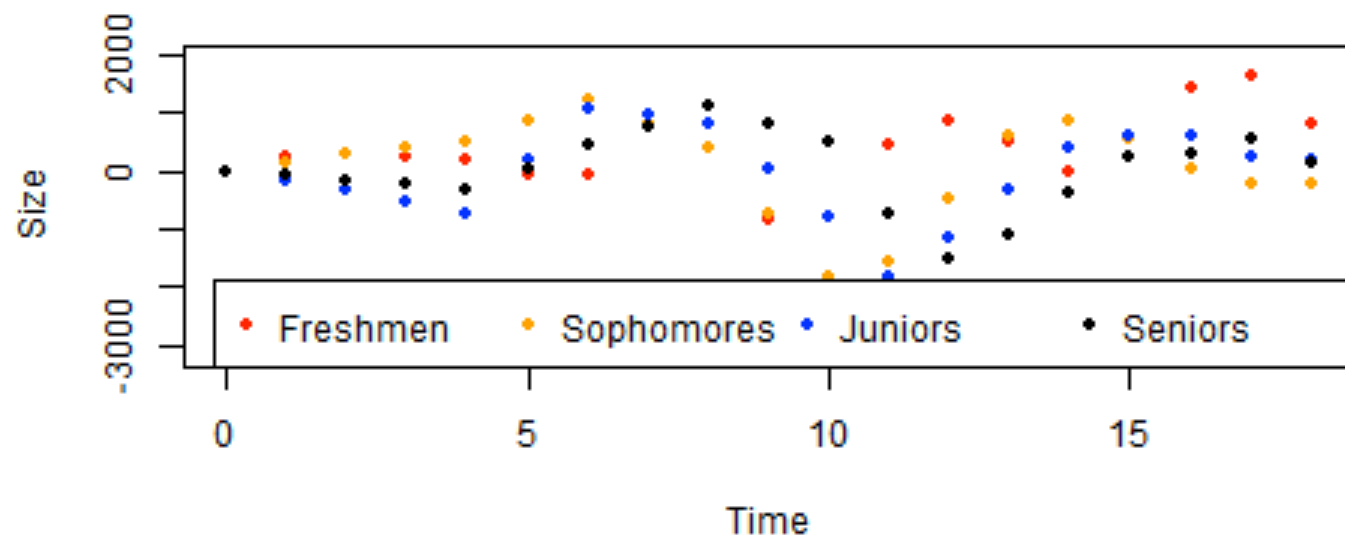
Mississippi Model 2 Residuals



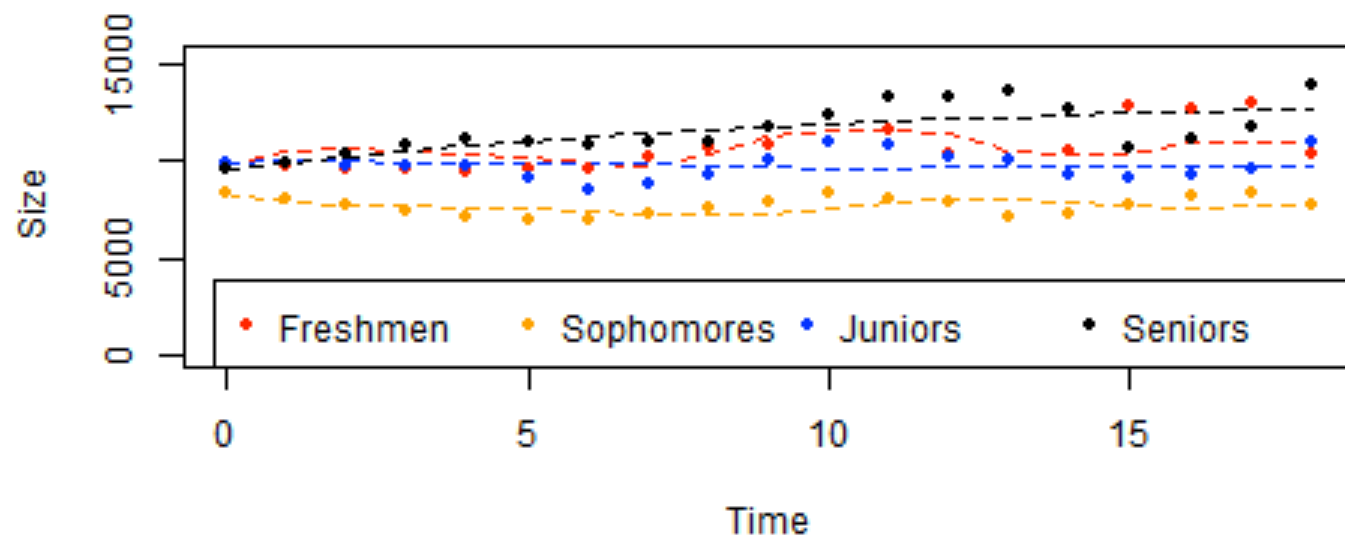
Missouri Model 2 Groups



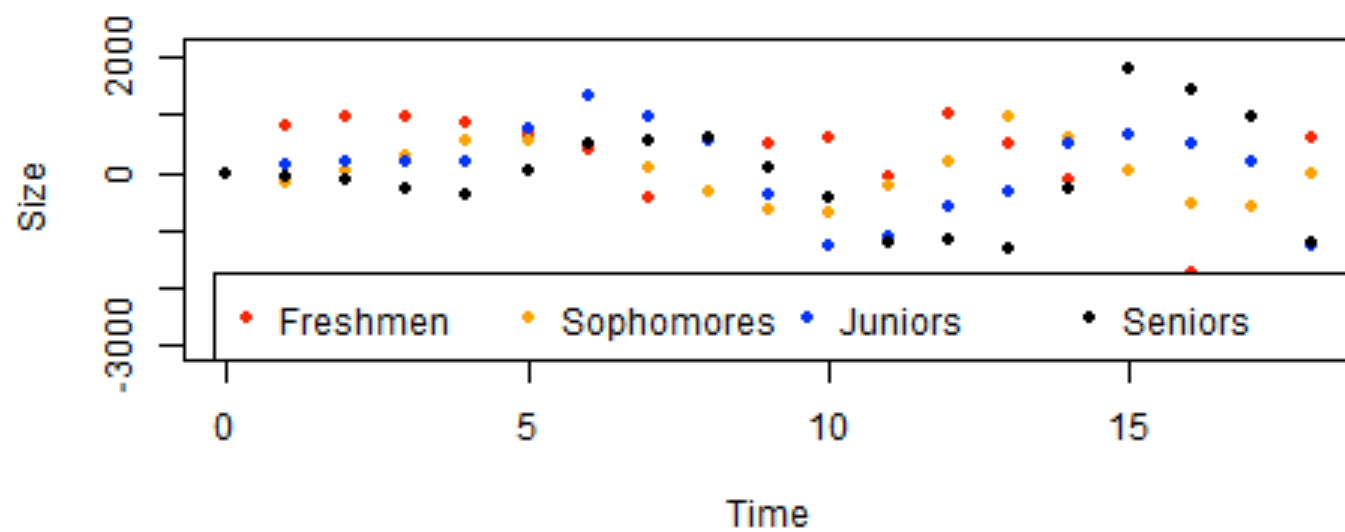
Missouri Model 2 Residuals



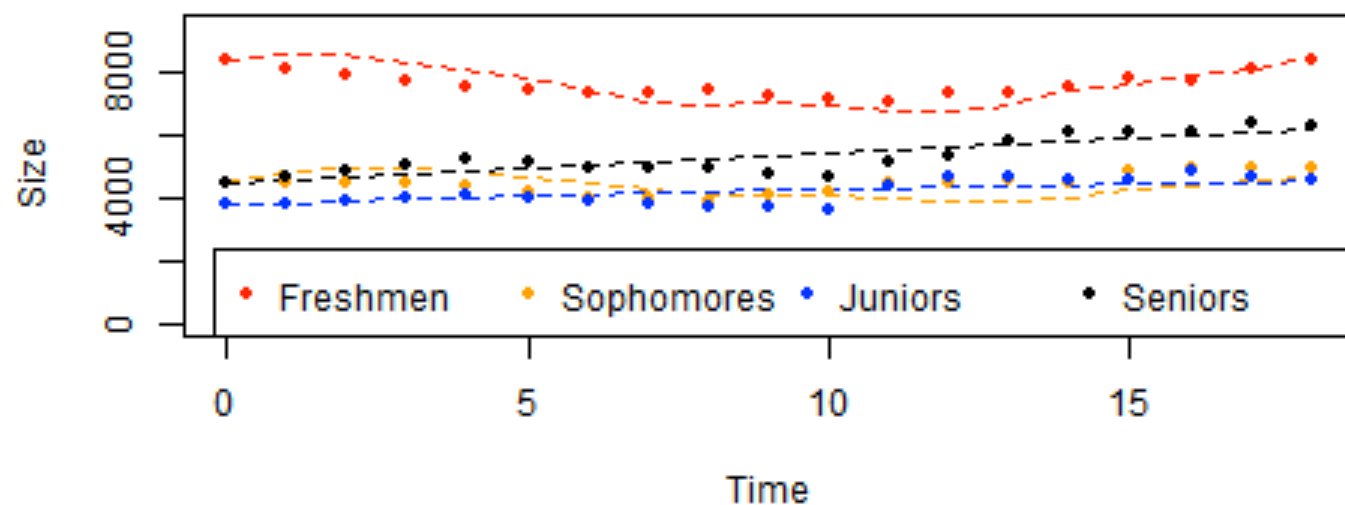
Montana Model 2 Groups



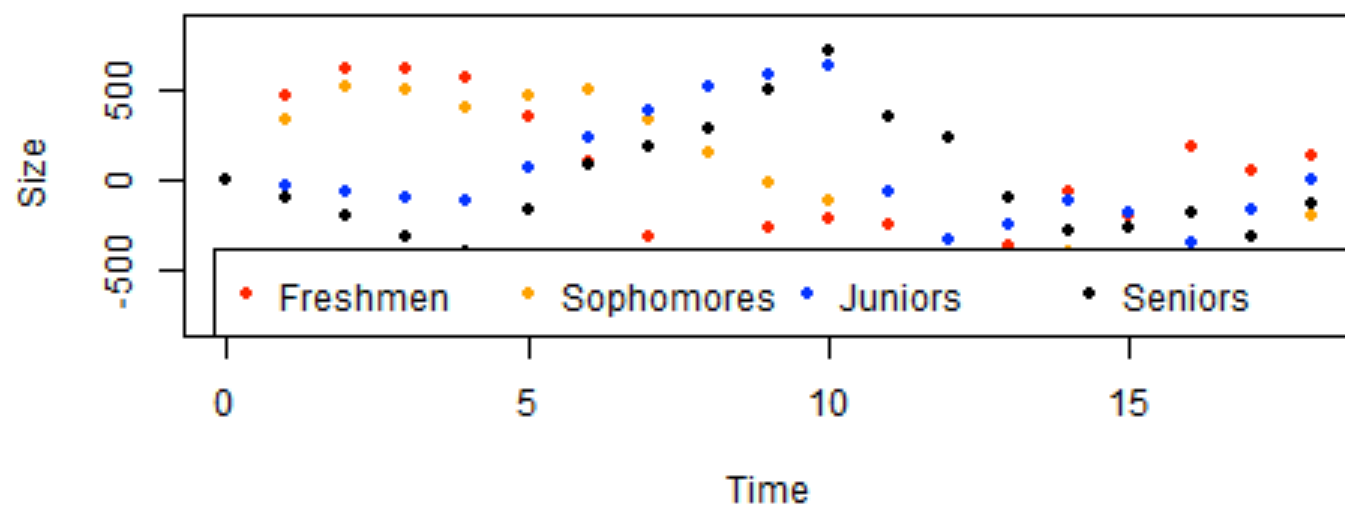
Montana Model 2 Residuals



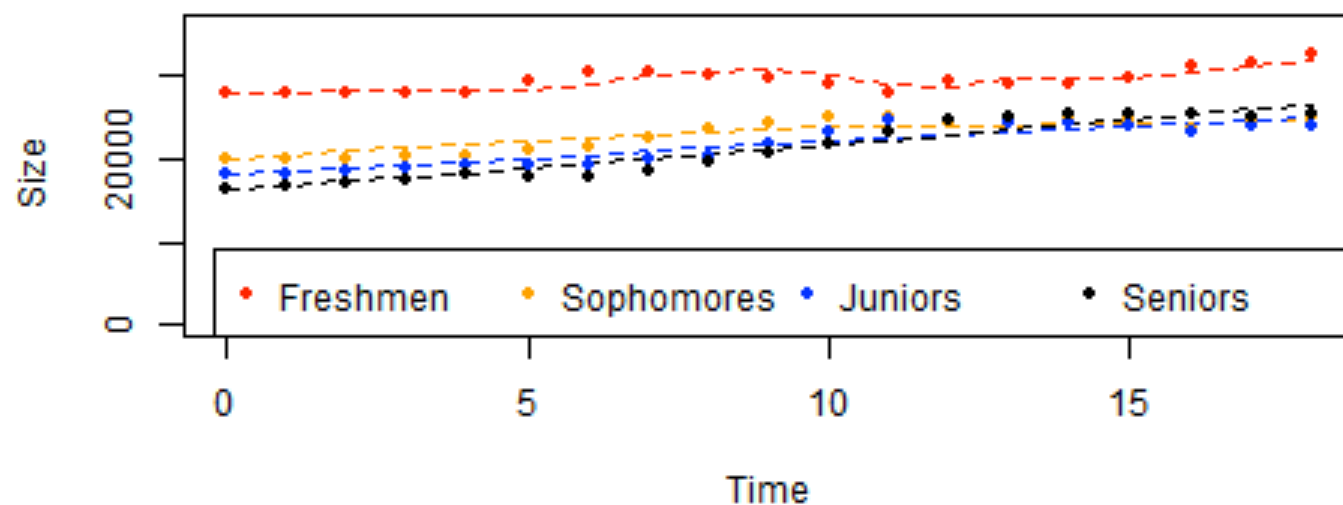
Nebraska Model 2 Groups



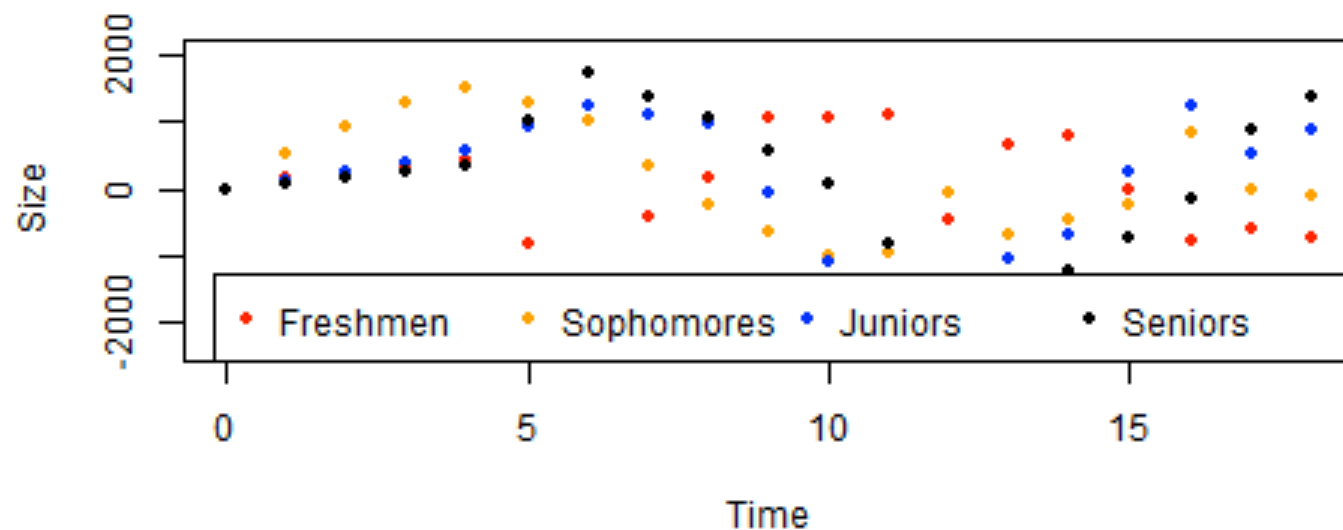
Nebraska Model 2 Residuals



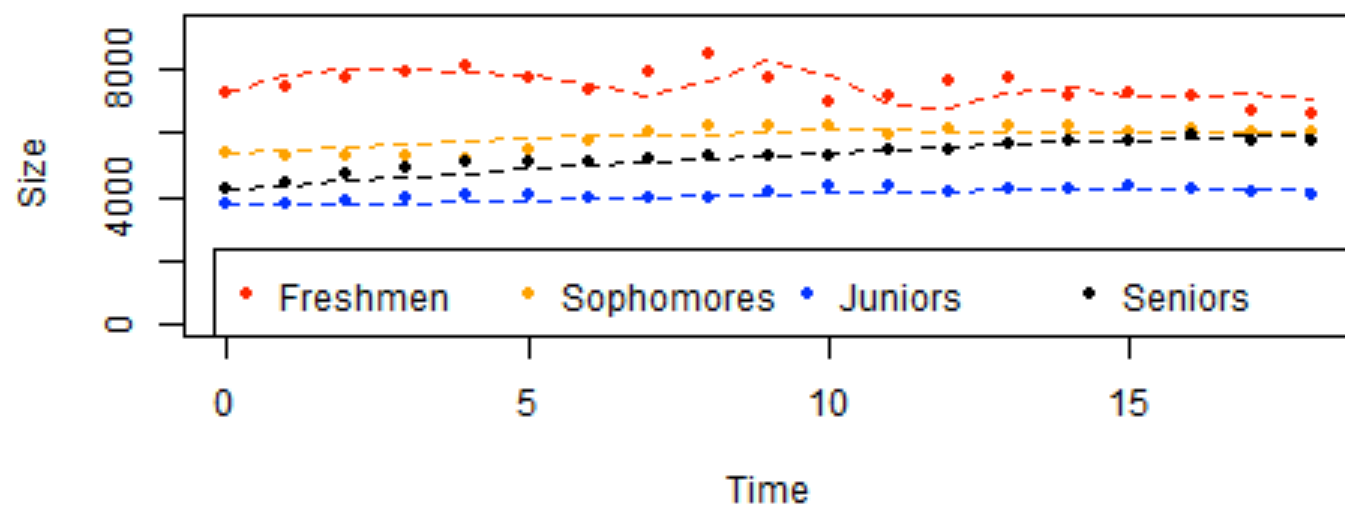
Nevada Model 2 Groups



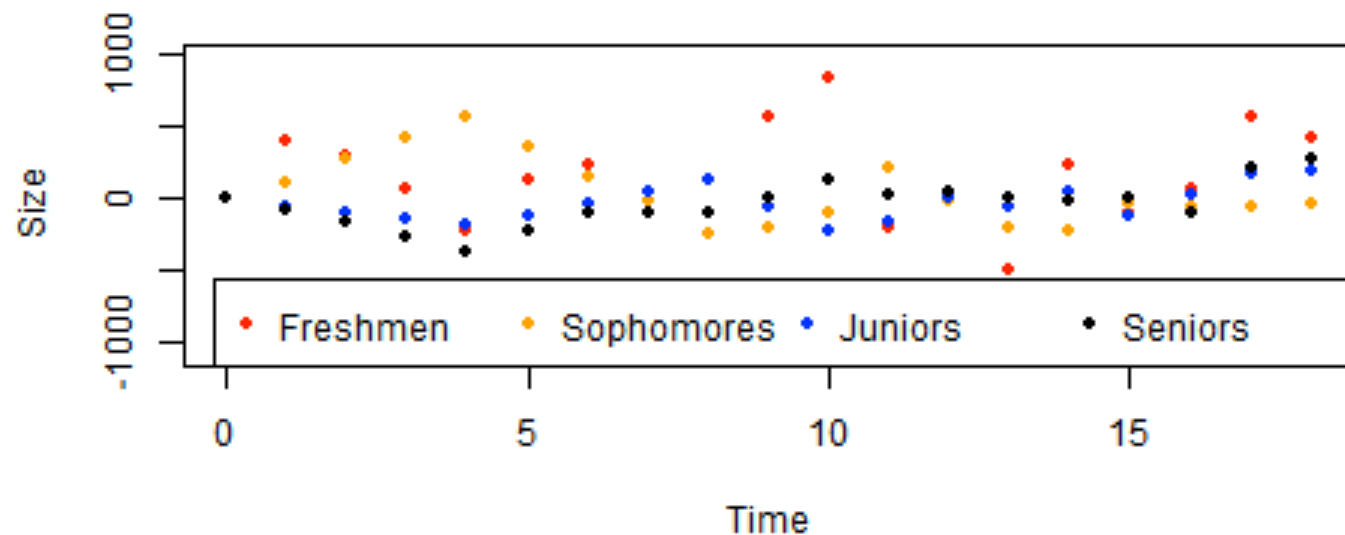
Nevada Model 2 Residuals



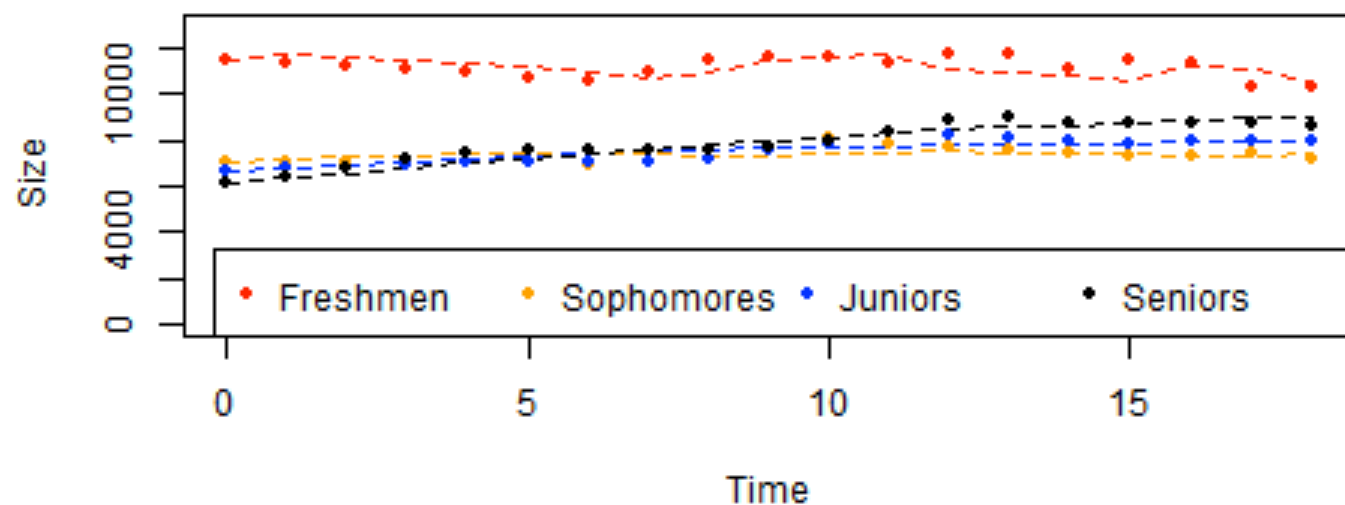
NewHampshire Model 2 Groups



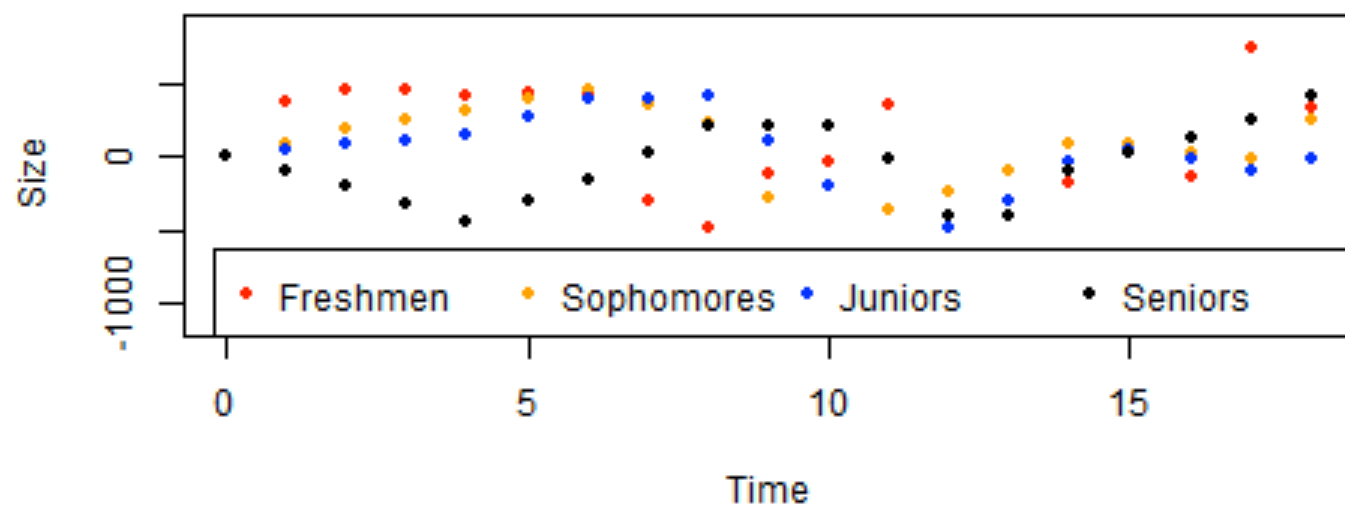
NewHampshire Model 2 Residuals



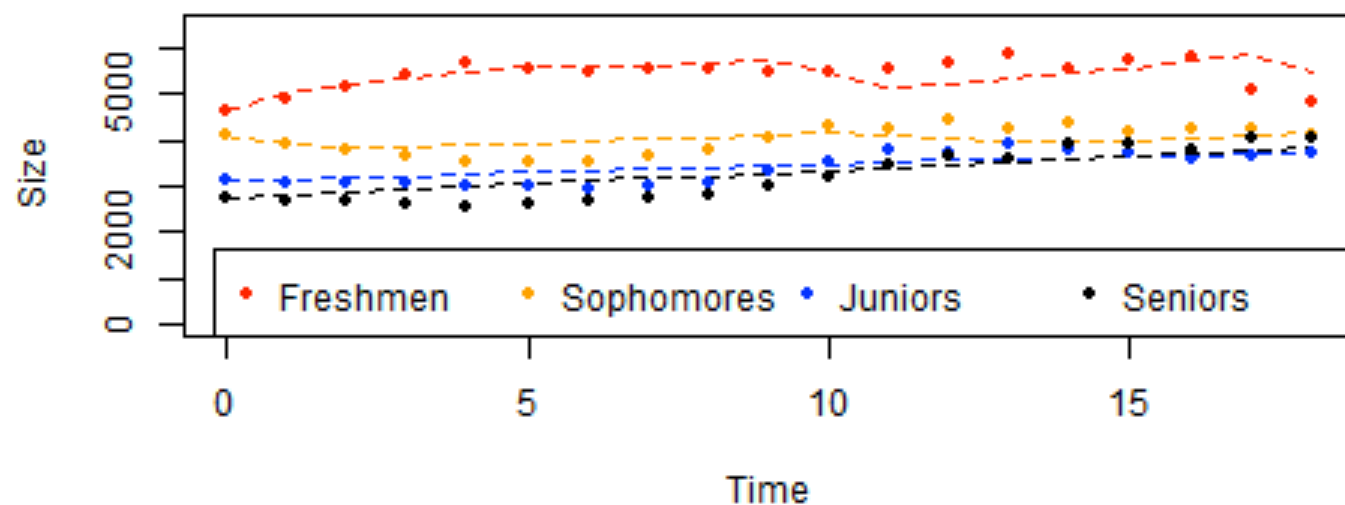
NewJersey Model 2 Groups



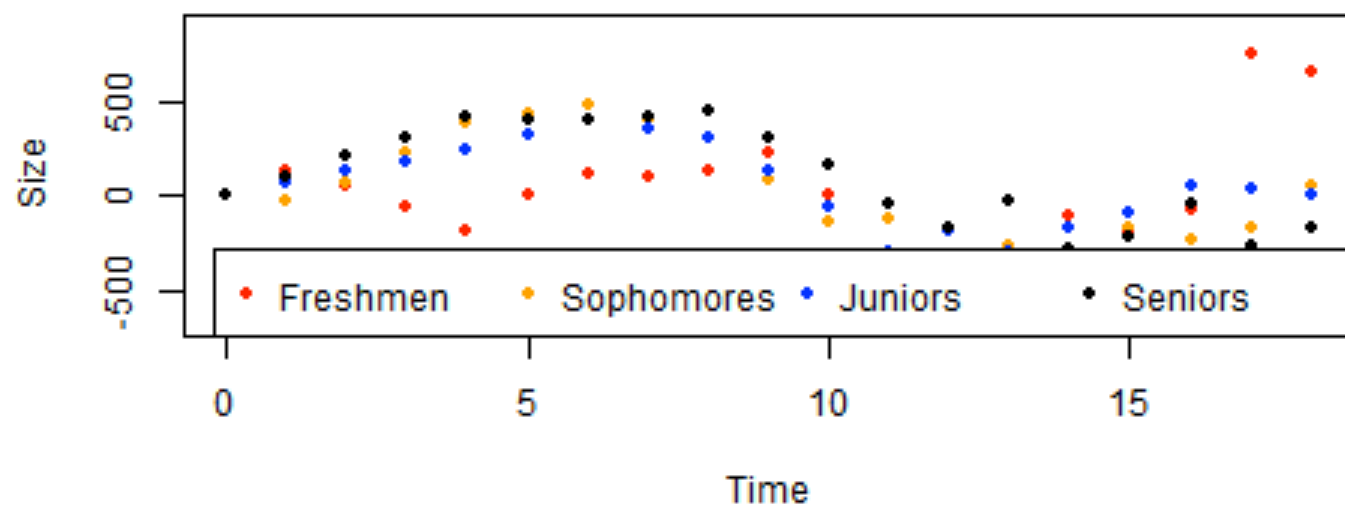
NewJersey Model 2 Residuals



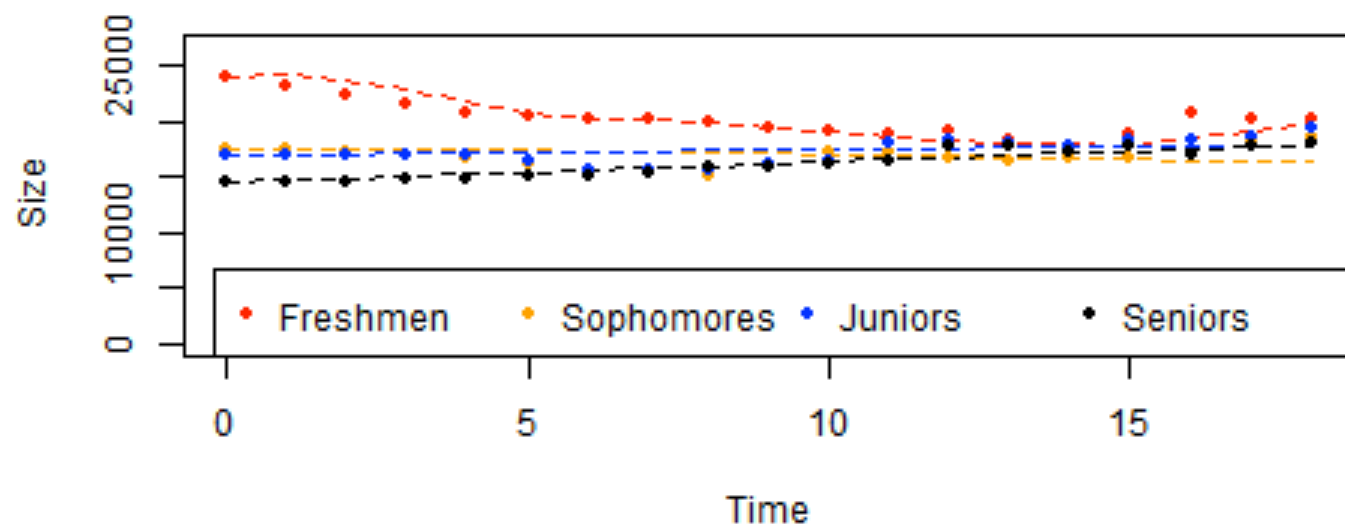
NewMexico Model 2 Groups



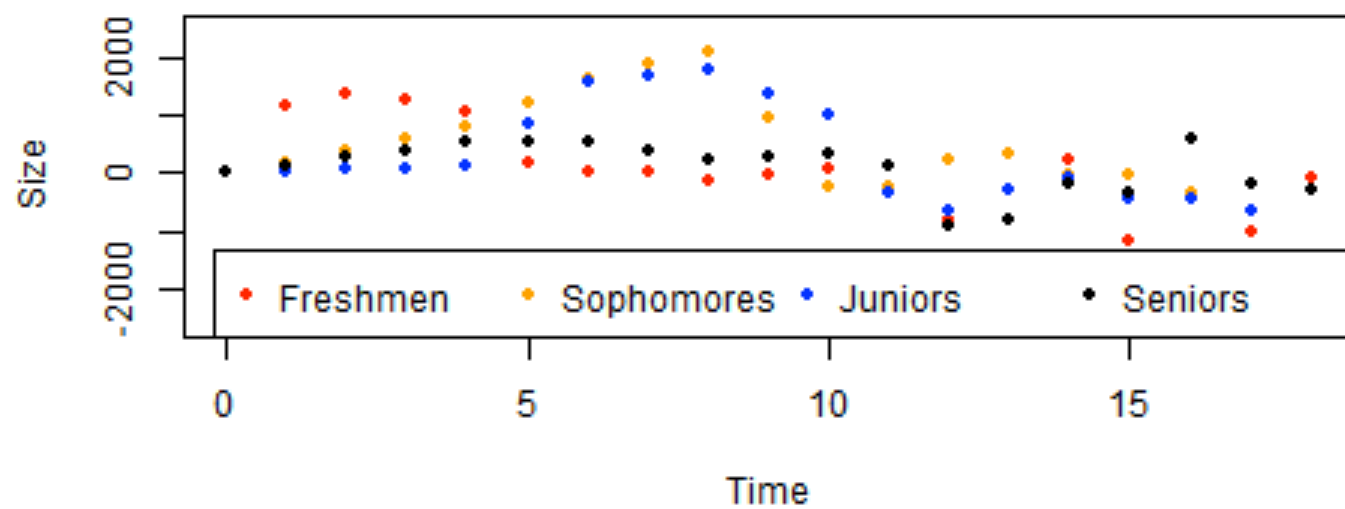
NewMexico Model 2 Residuals



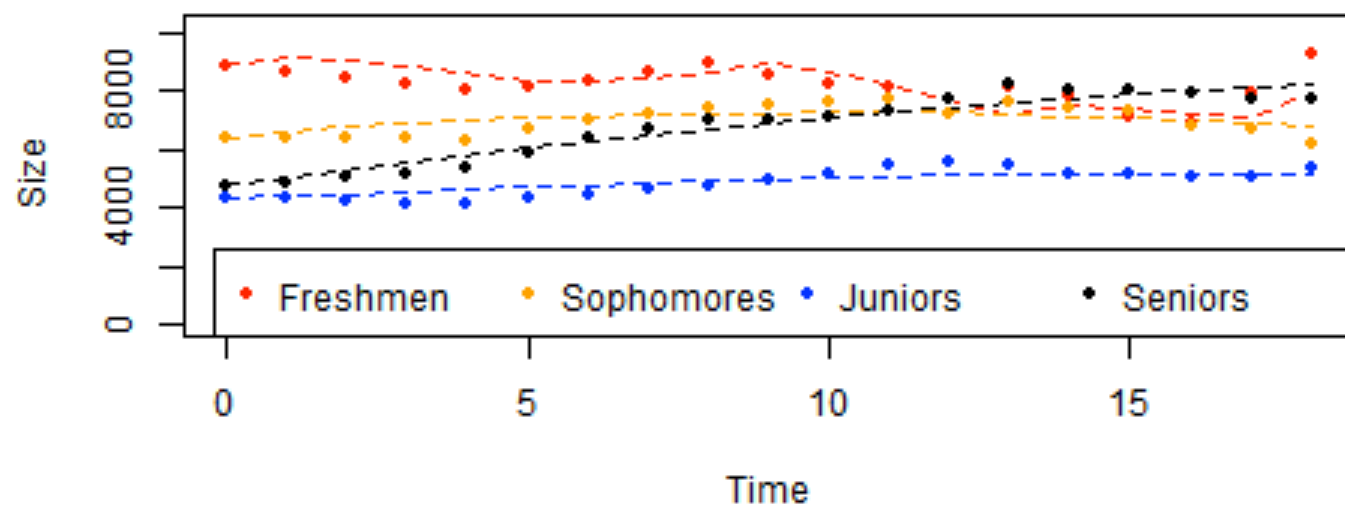
NewYork Model 2 Groups



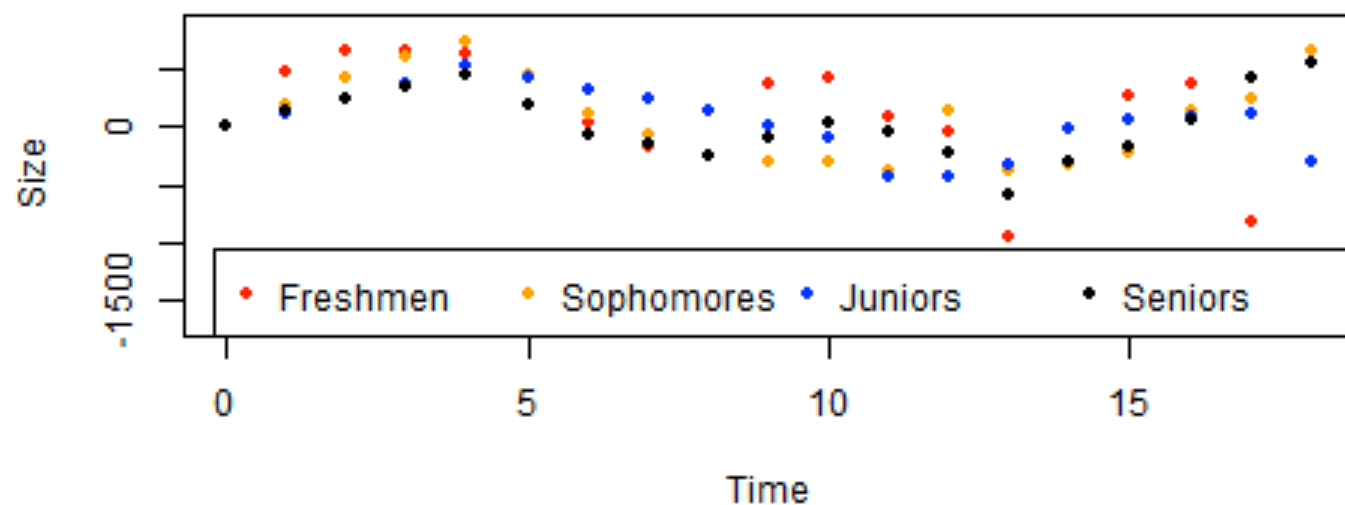
NewYork Model 2 Residuals



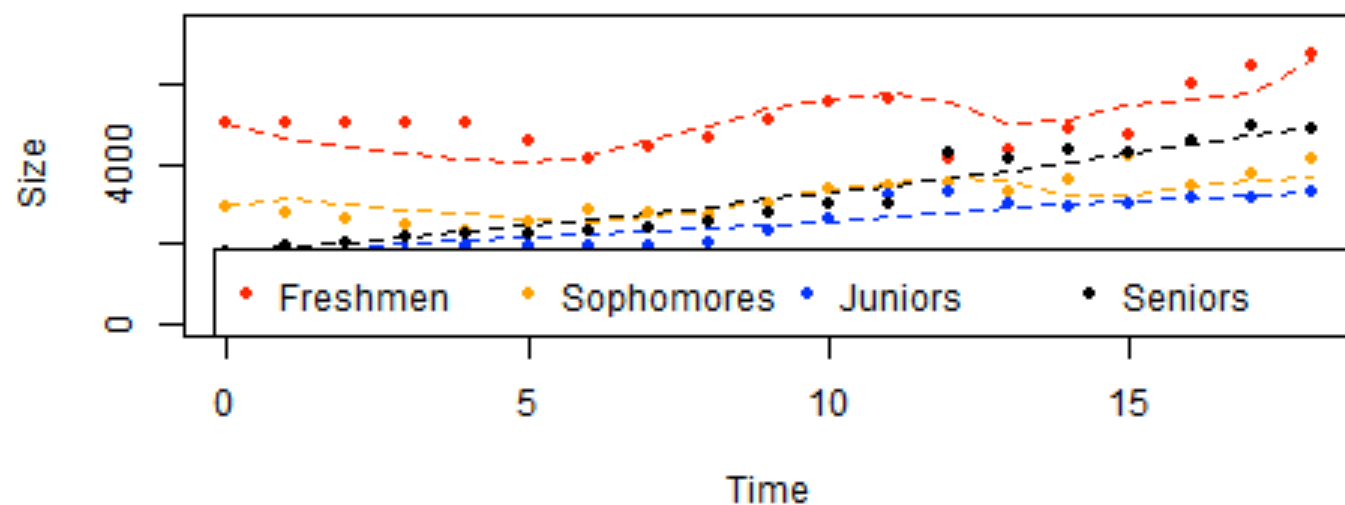
NorthCarolina Model 2 Groups



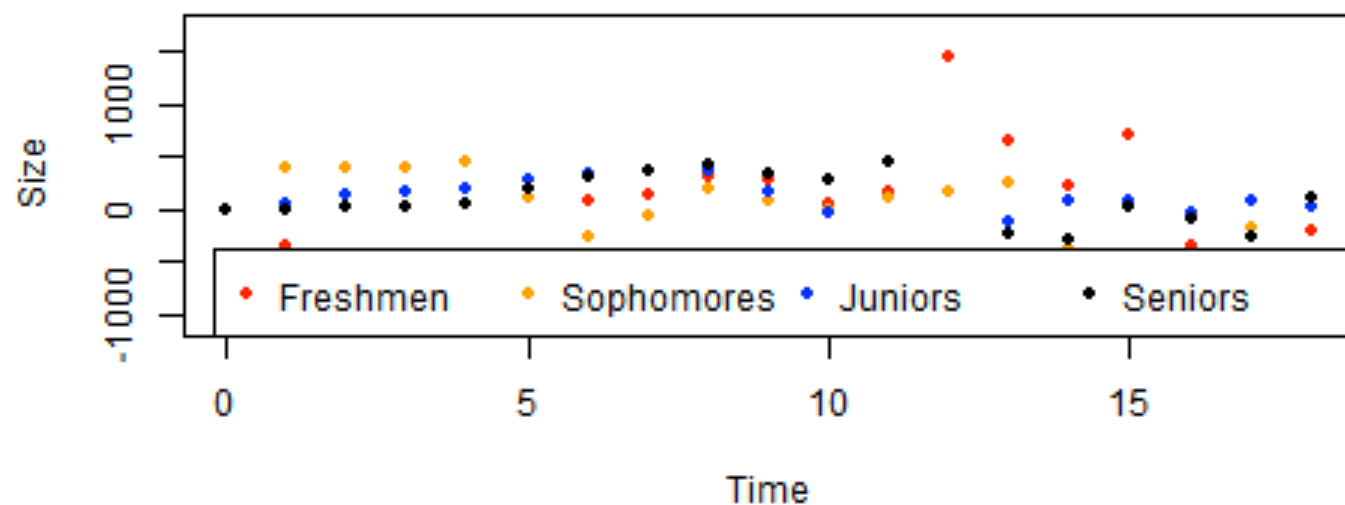
NorthCarolina Model 2 Residuals



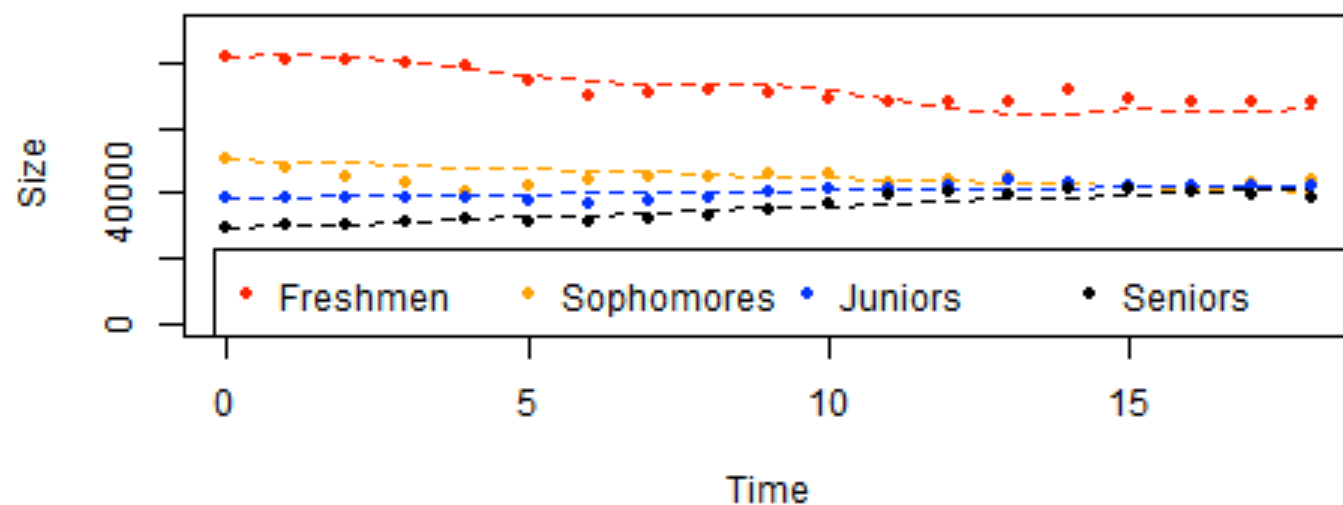
NorthDakota Model 2 Groups



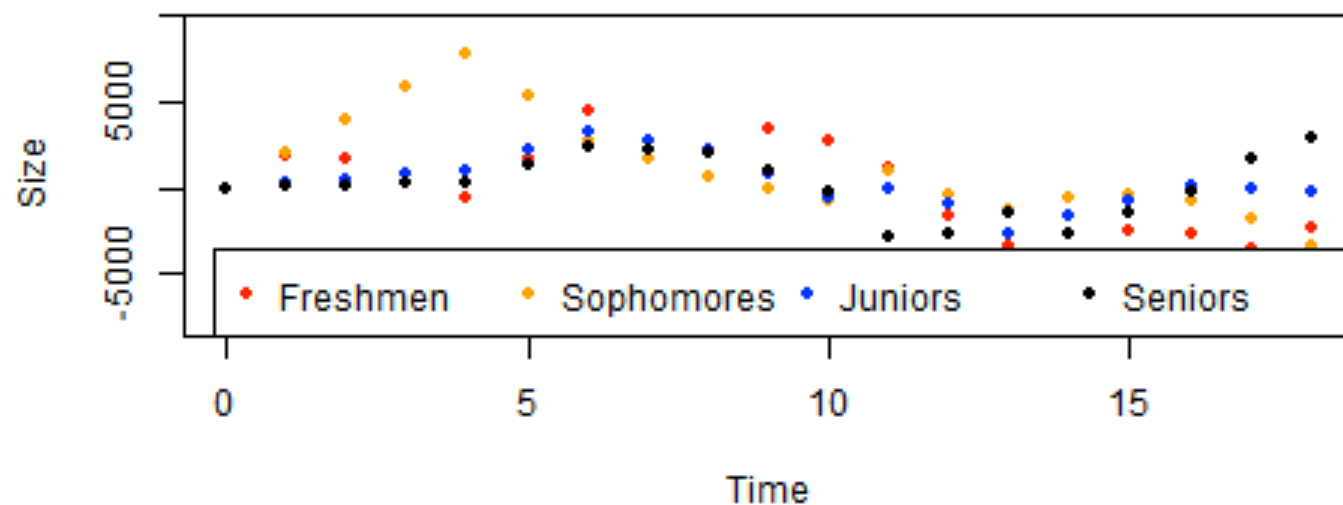
NorthDakota Model 2 Residuals



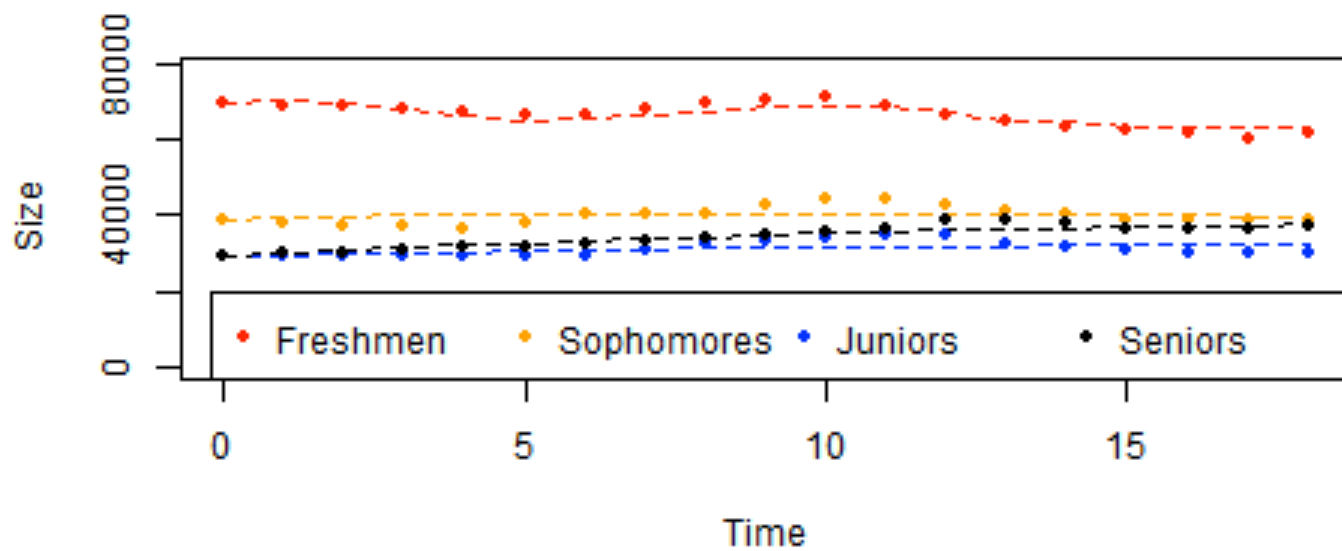
Ohio Model 2 Groups



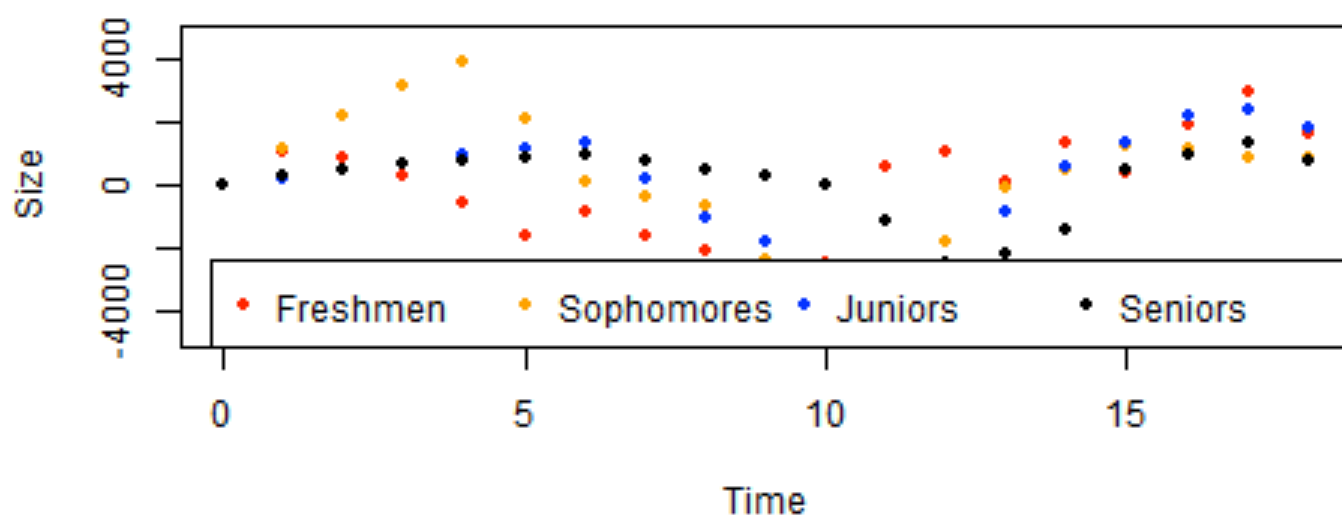
Ohio Model 2 Residuals



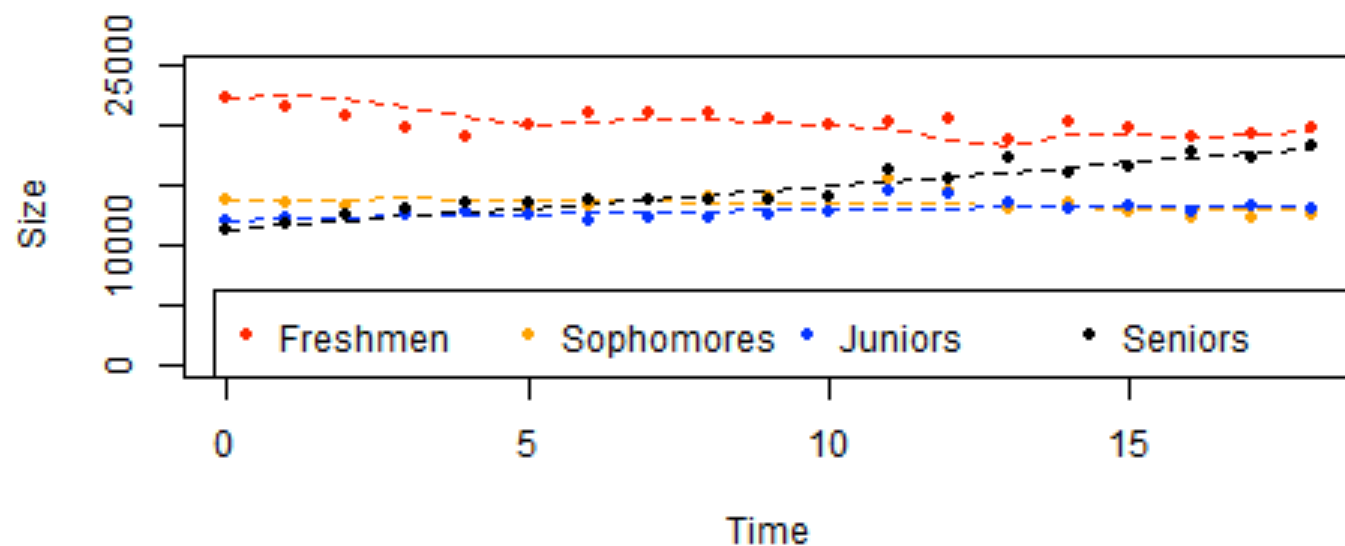
Oklahoma Model 2 Groups



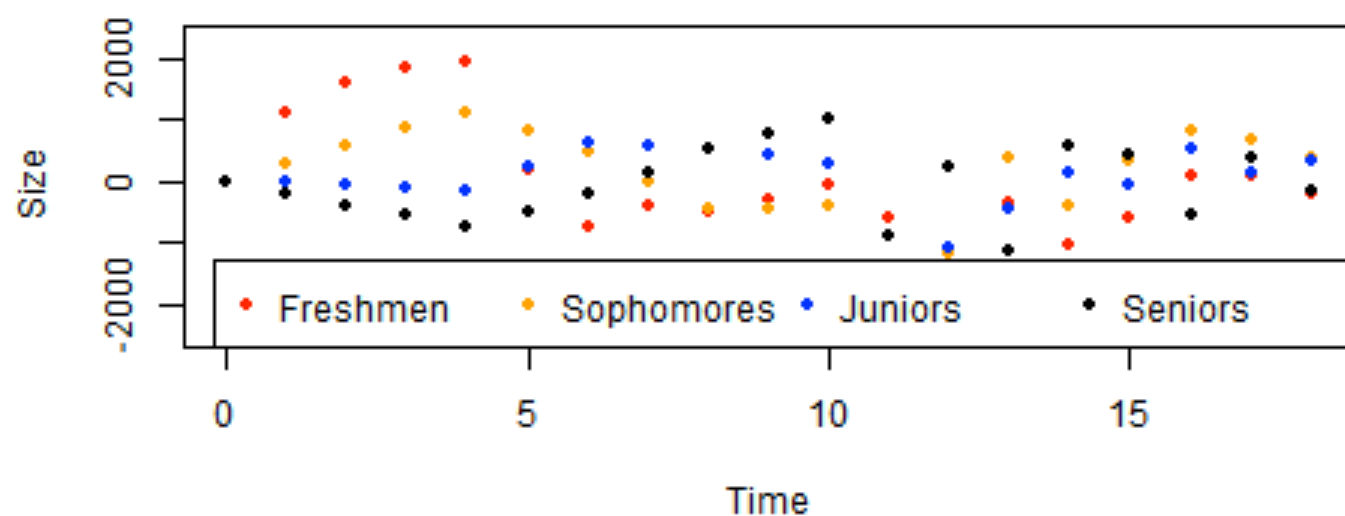
Oklahoma Model 2 Residuals



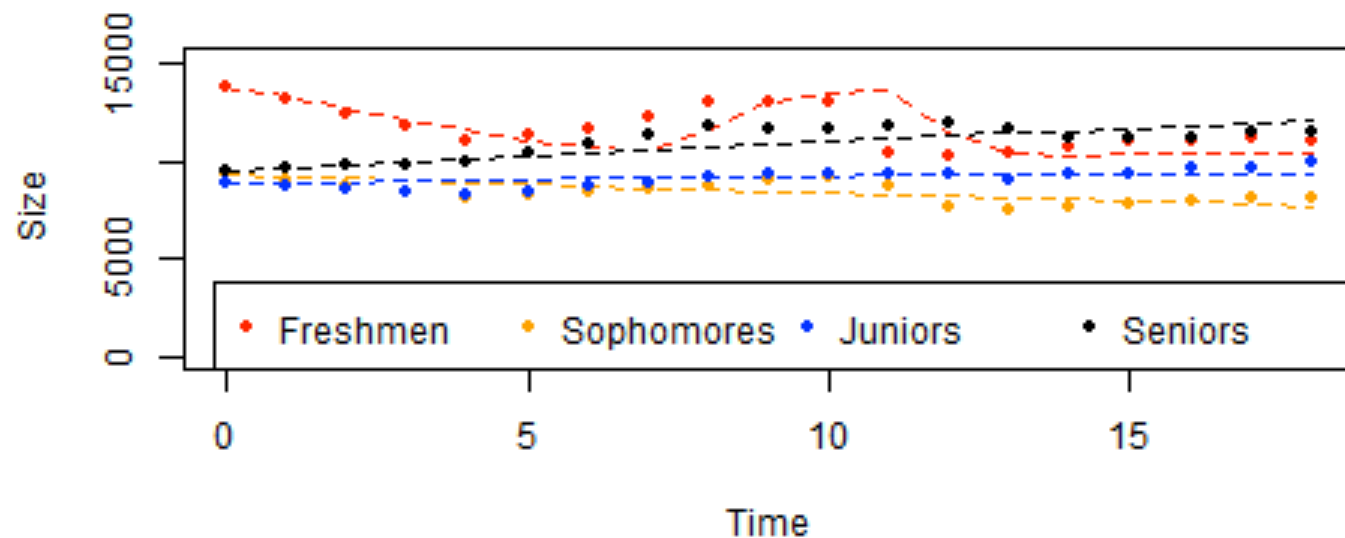
Oregon Model 2 Groups



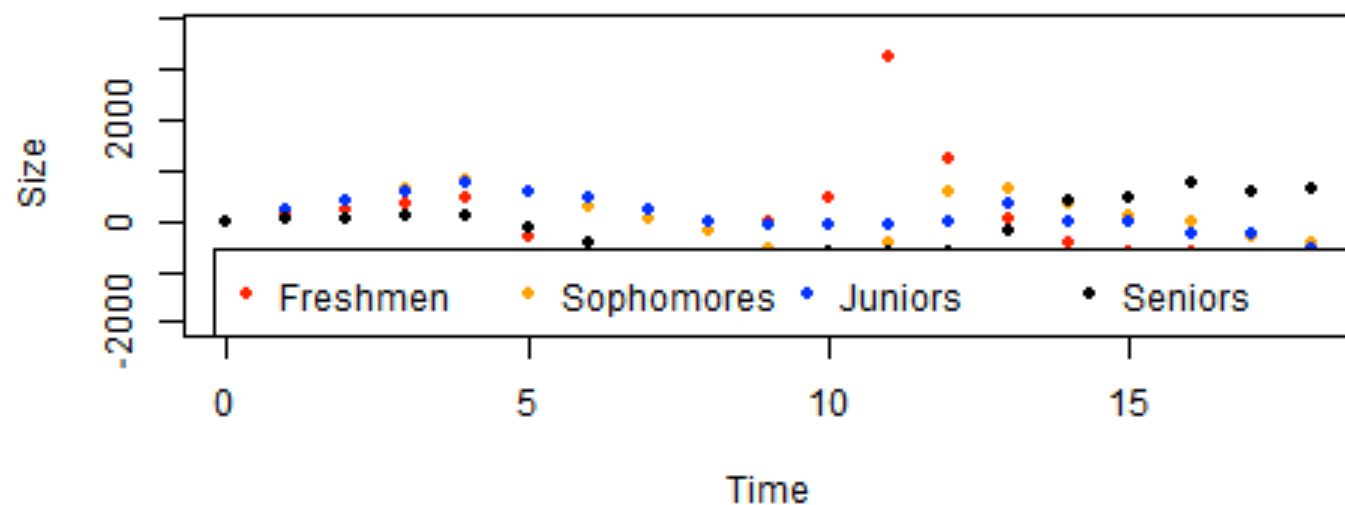
Oregon Model 2 Residuals



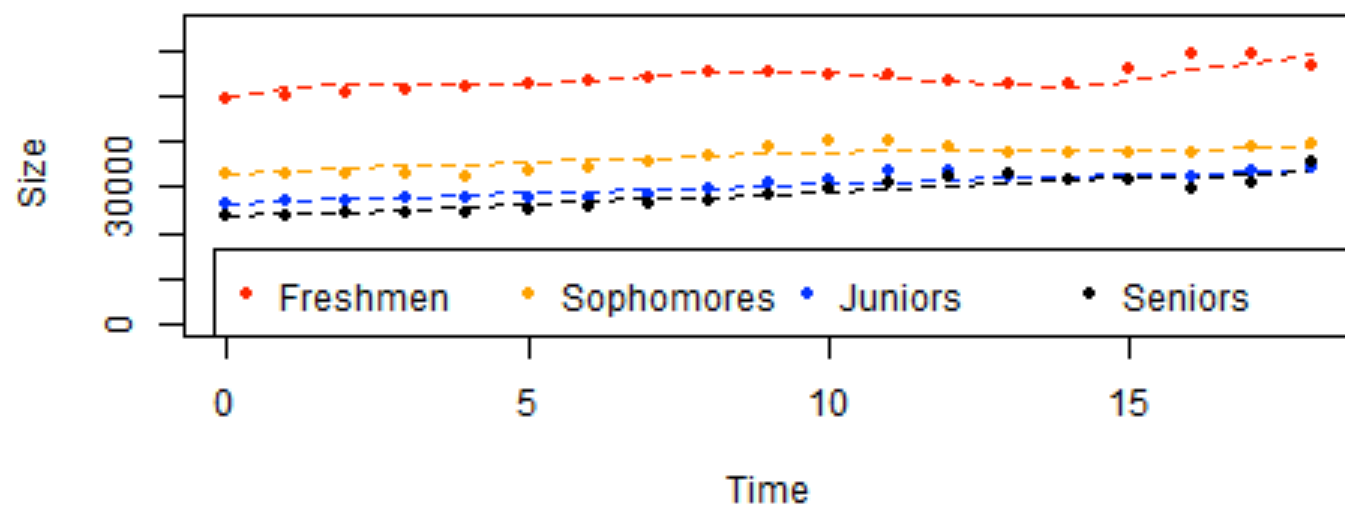
Pennsylvania Model 2 Groups



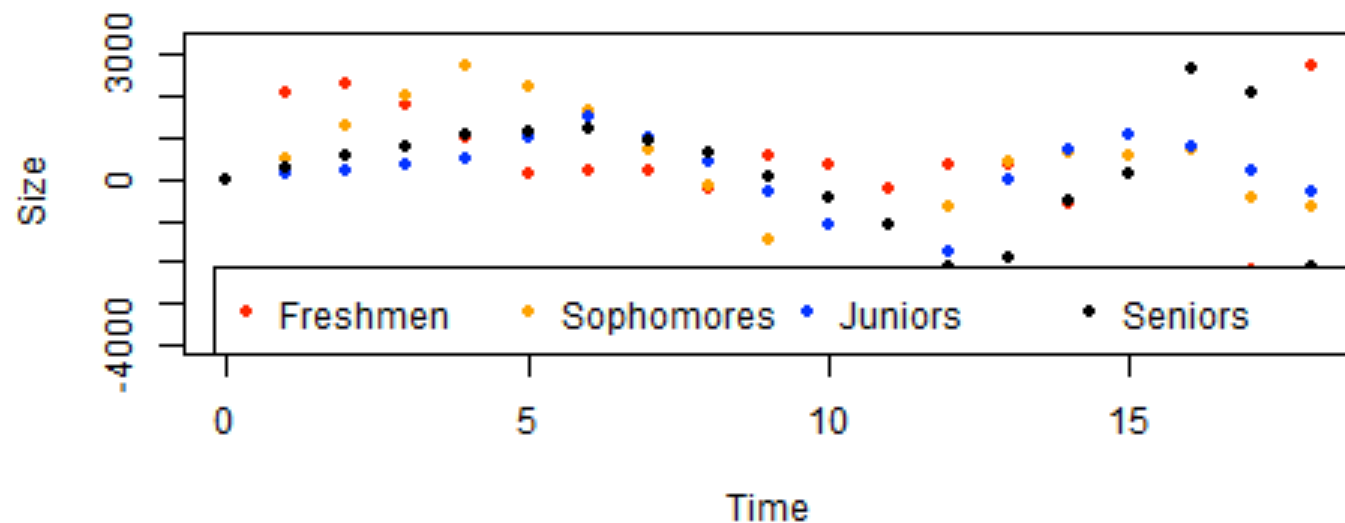
Pennsylvania Model 2 Residuals



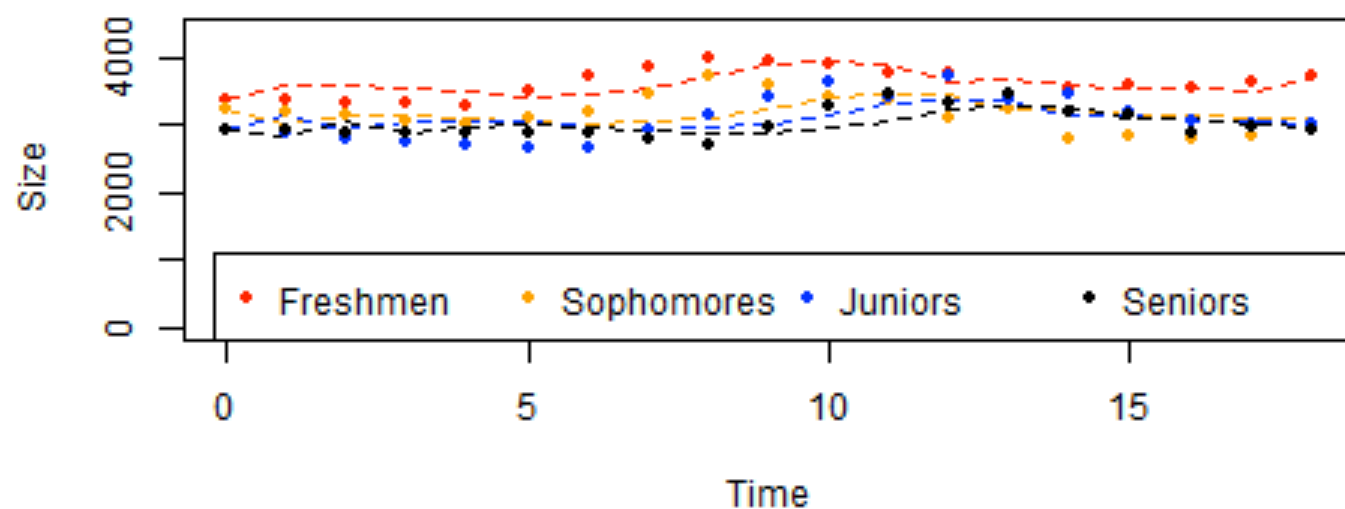
Rhodelsland Model 2 Groups



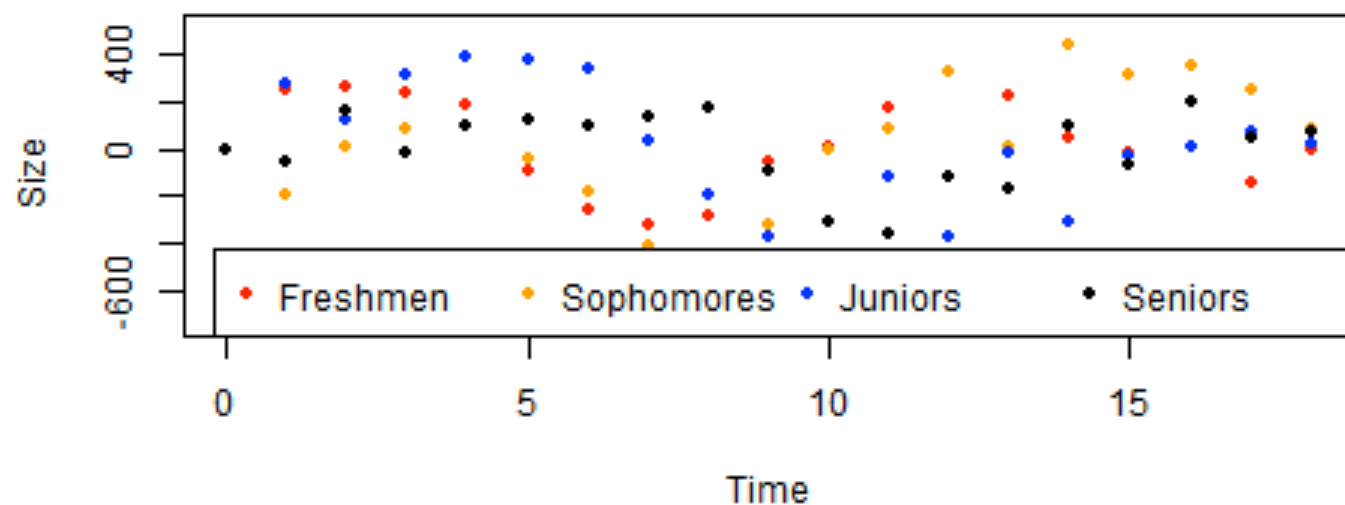
Rhodelsland Model 2 Residuals



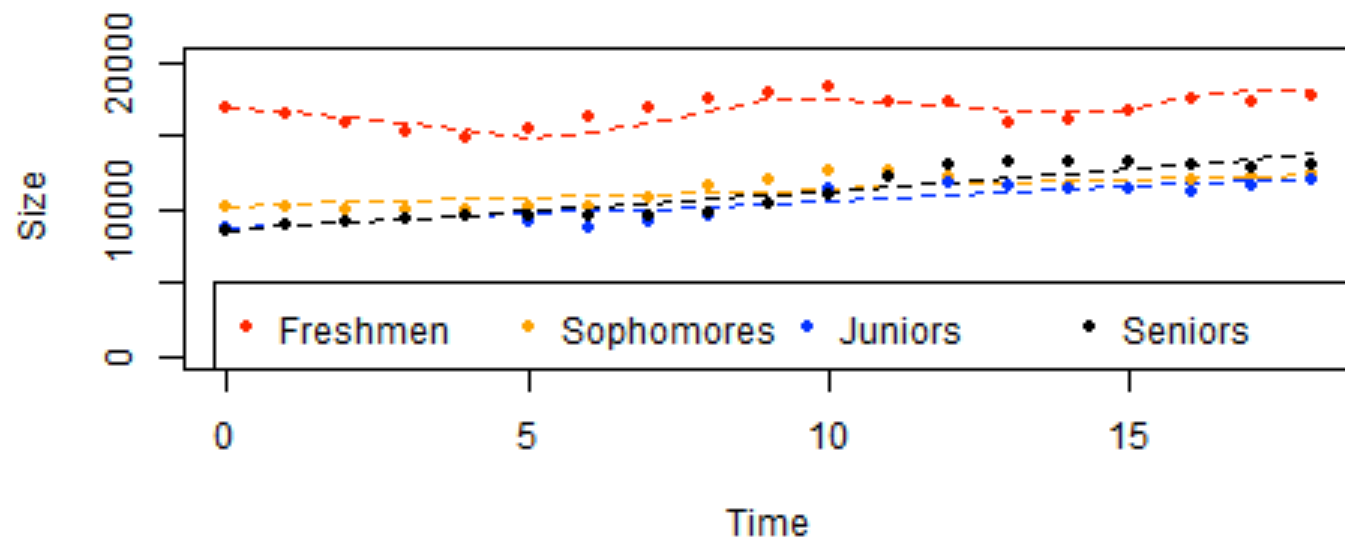
SouthCarolina Model 2 Groups



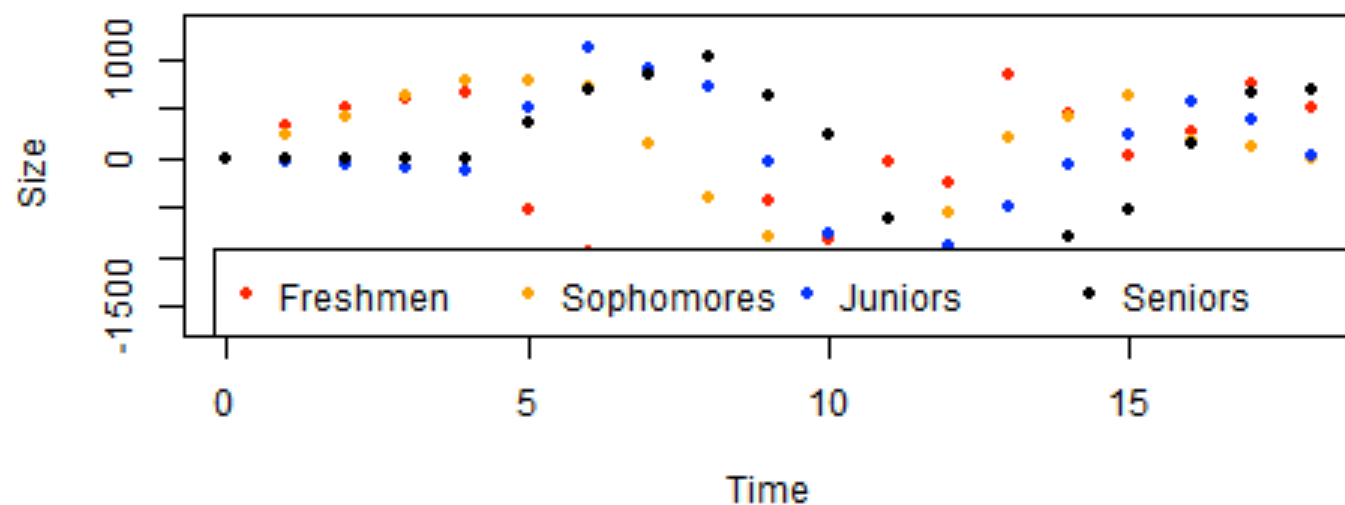
SouthCarolina Model 2 Residuals



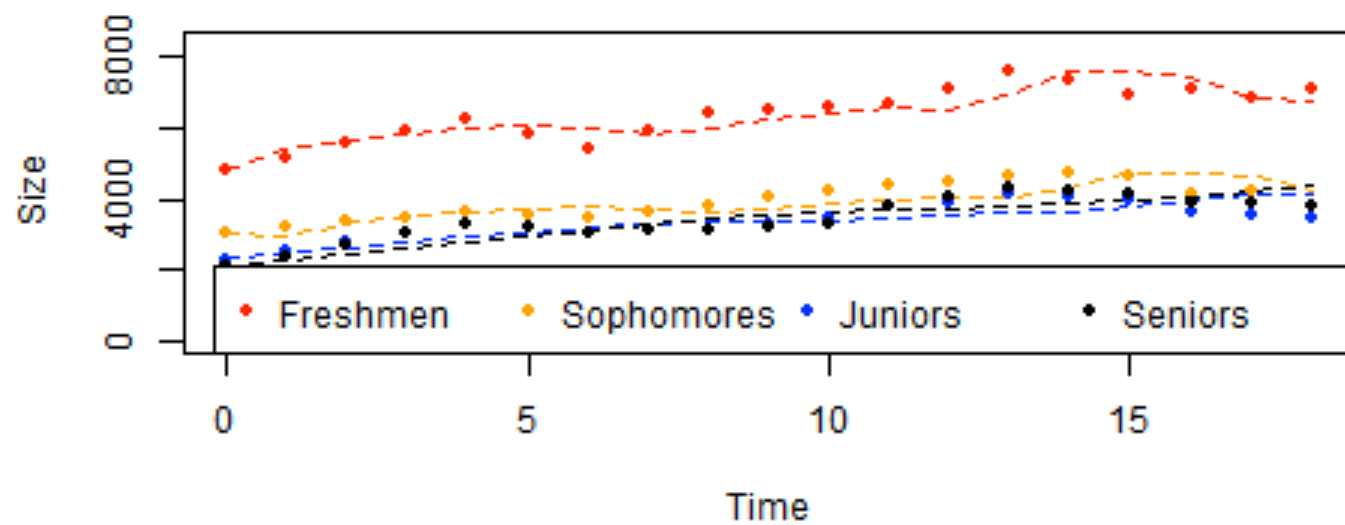
SouthDakota Model 2 Groups



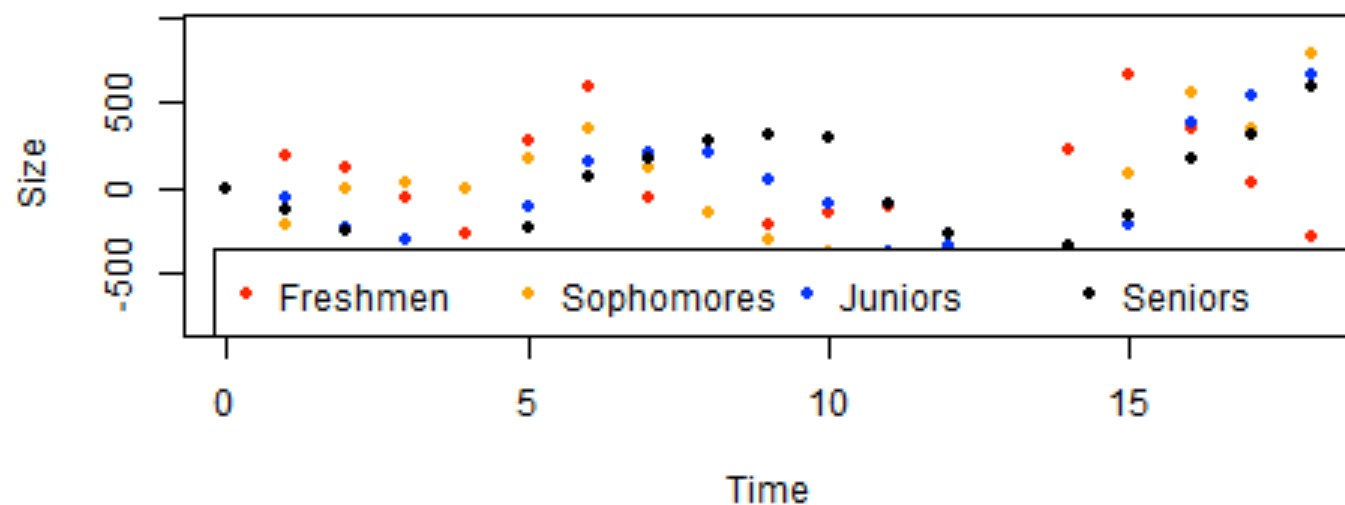
SouthDakota Model 2 Residuals



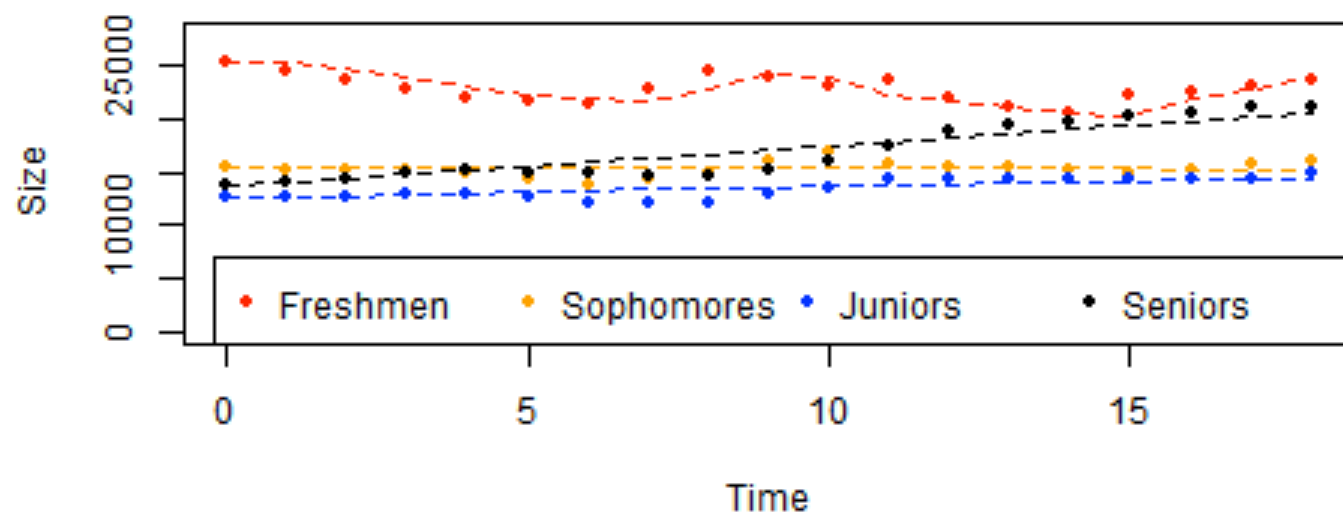
Tennessee Model 2 Groups



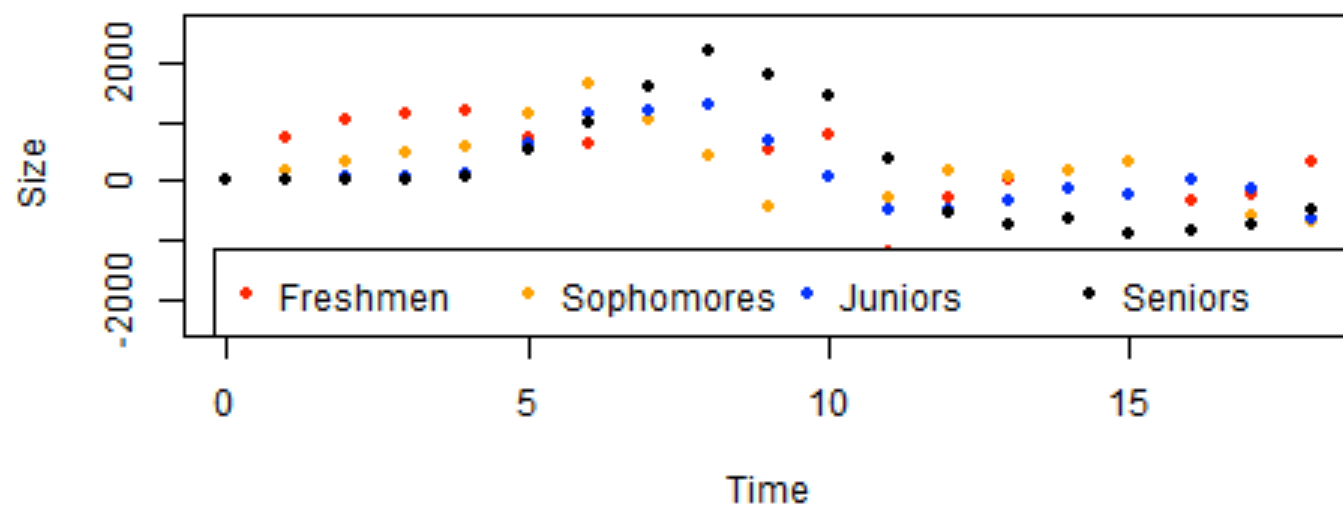
Tennessee Model 2 Residuals



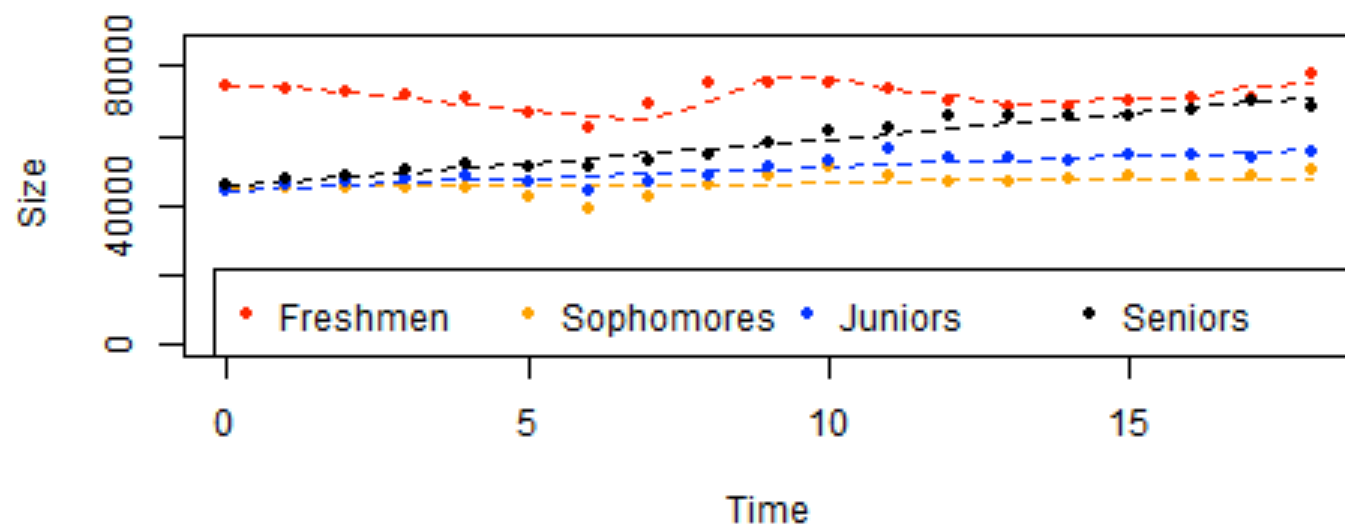
Texas Model 2 Groups



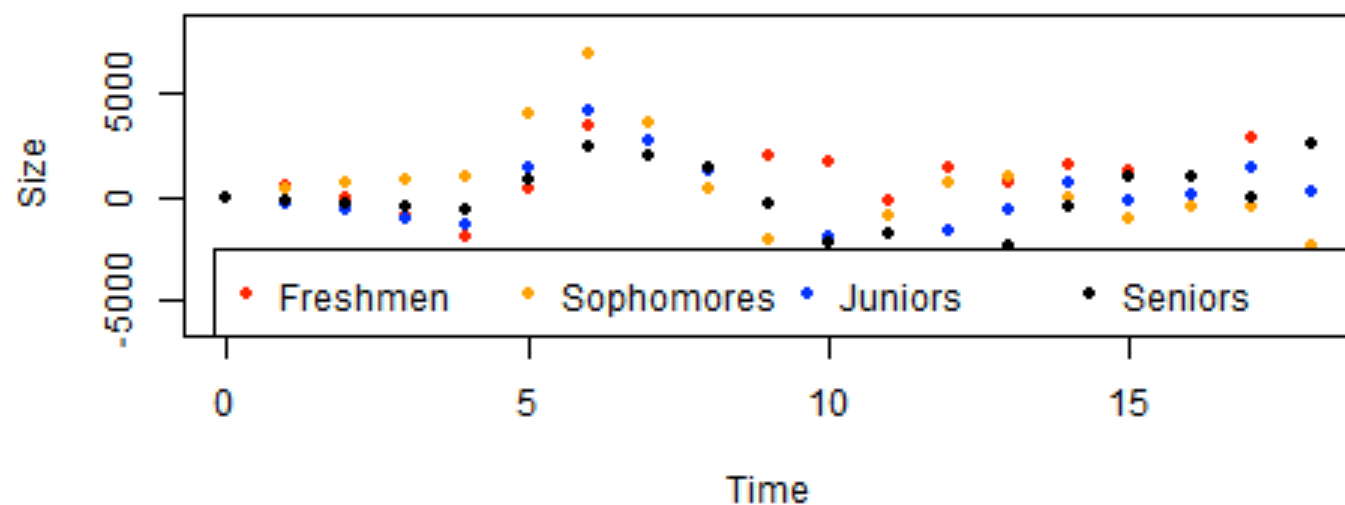
Texas Model 2 Residuals



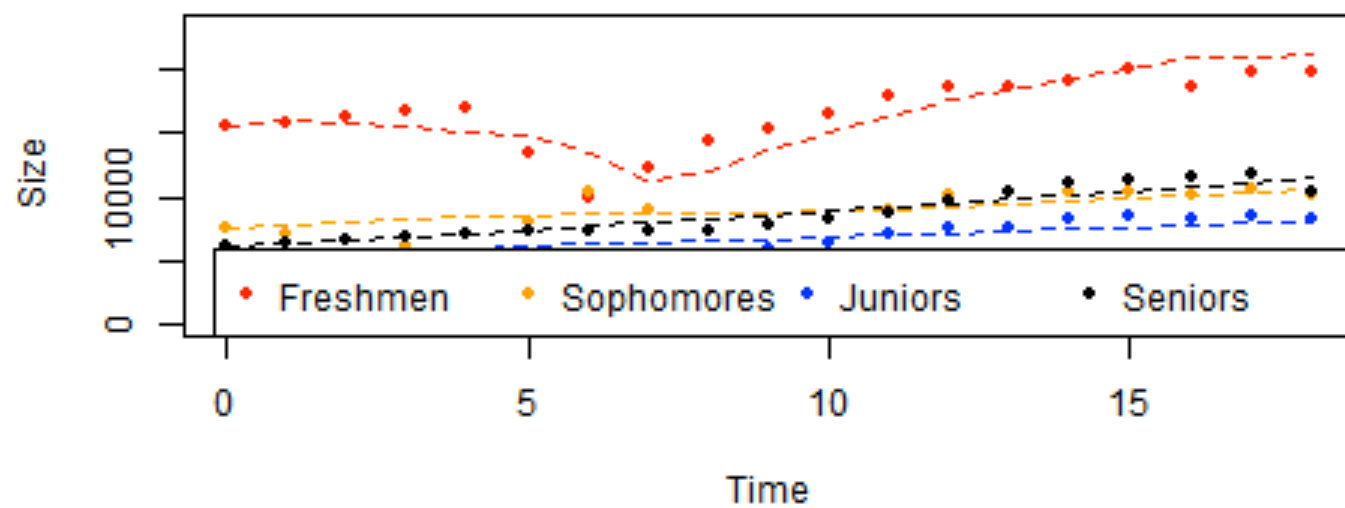
Utah Model 2 Groups



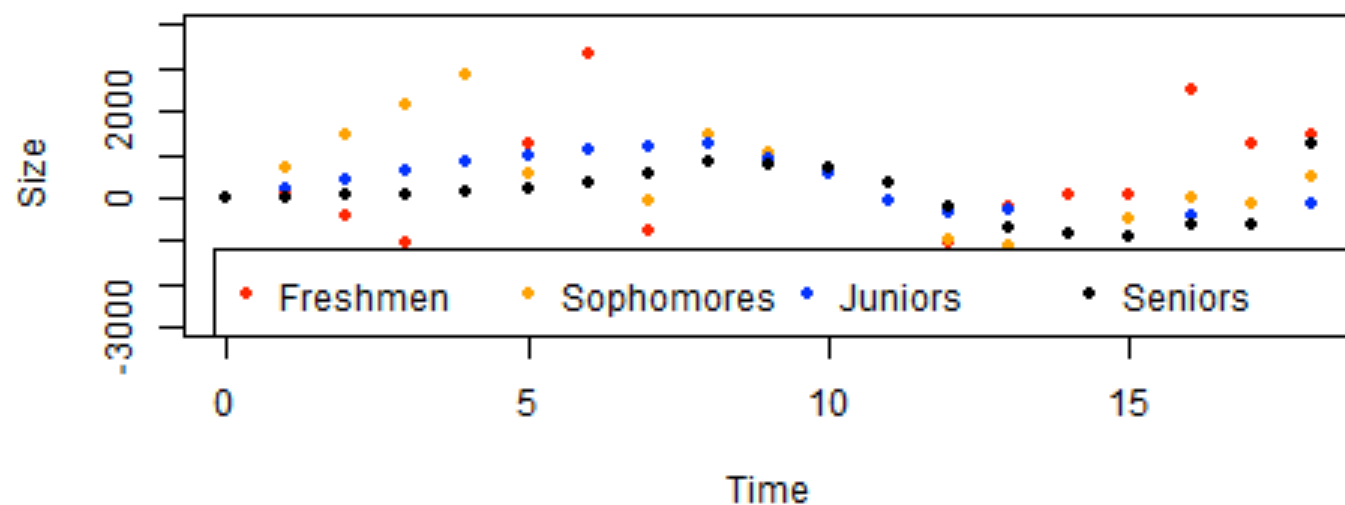
Utah Model 2 Residuals



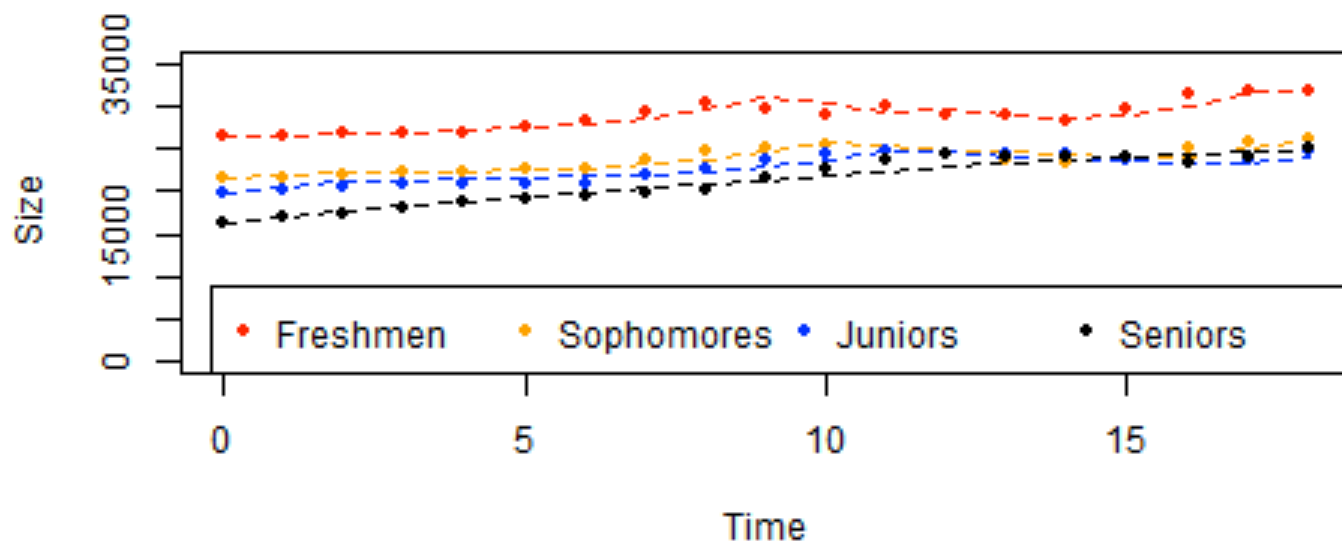
Vermont Model 2 Groups



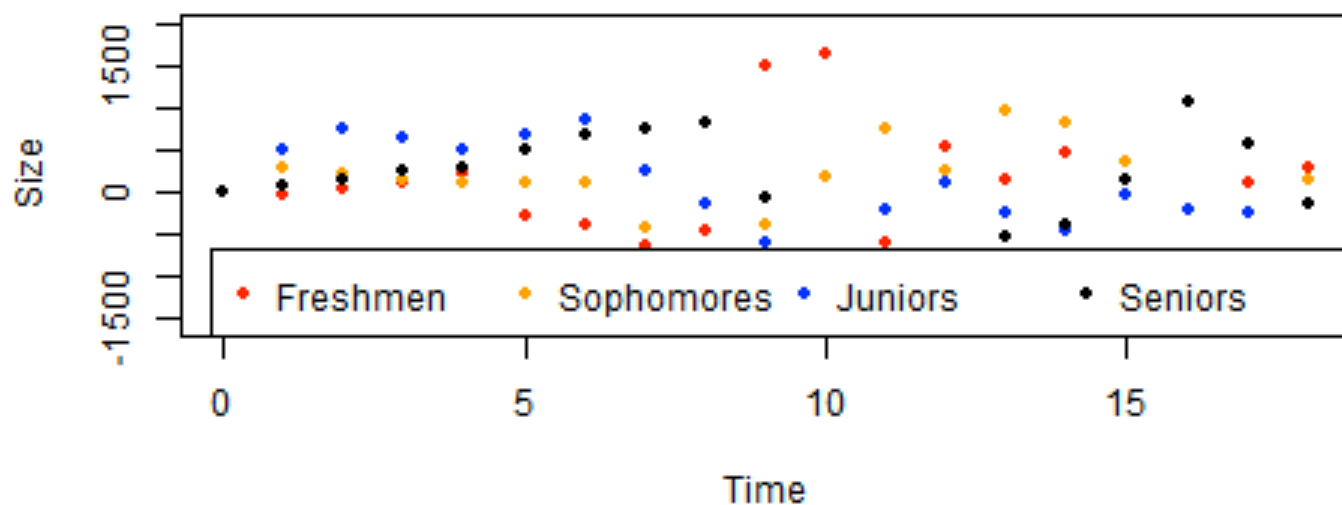
Vermont Model 2 Residuals



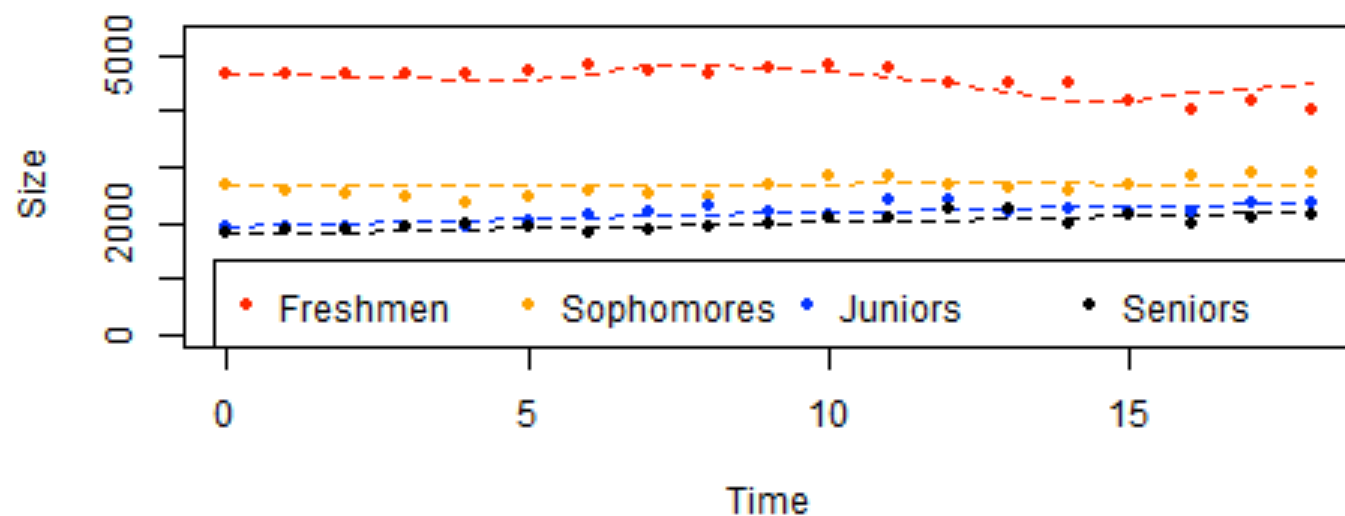
Virginia Model 2 Groups



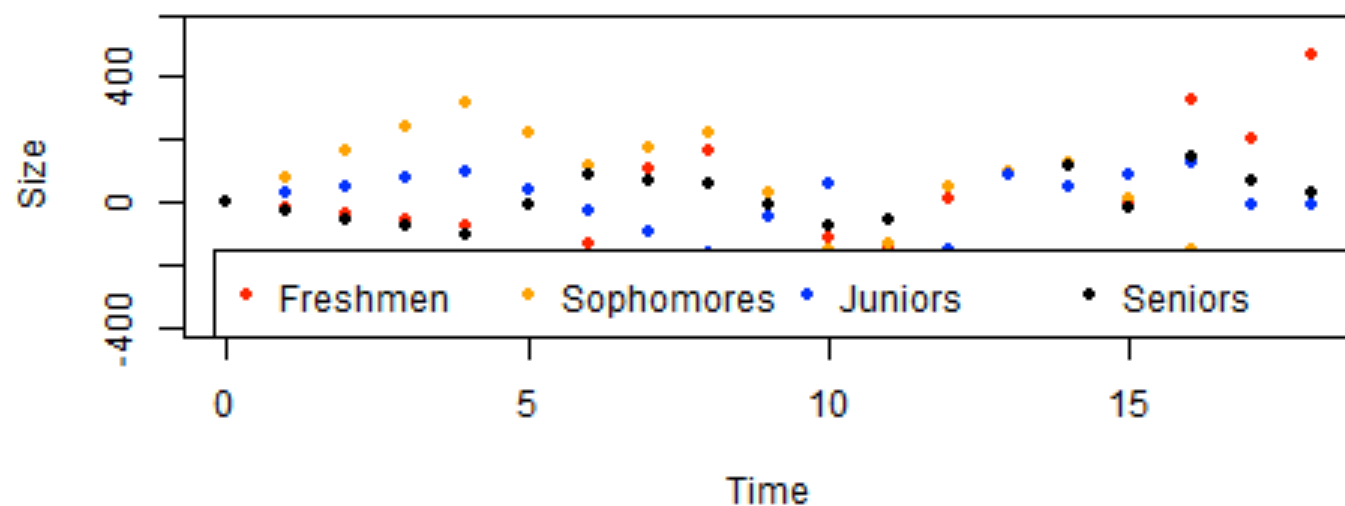
Virginia Model 2 Residuals



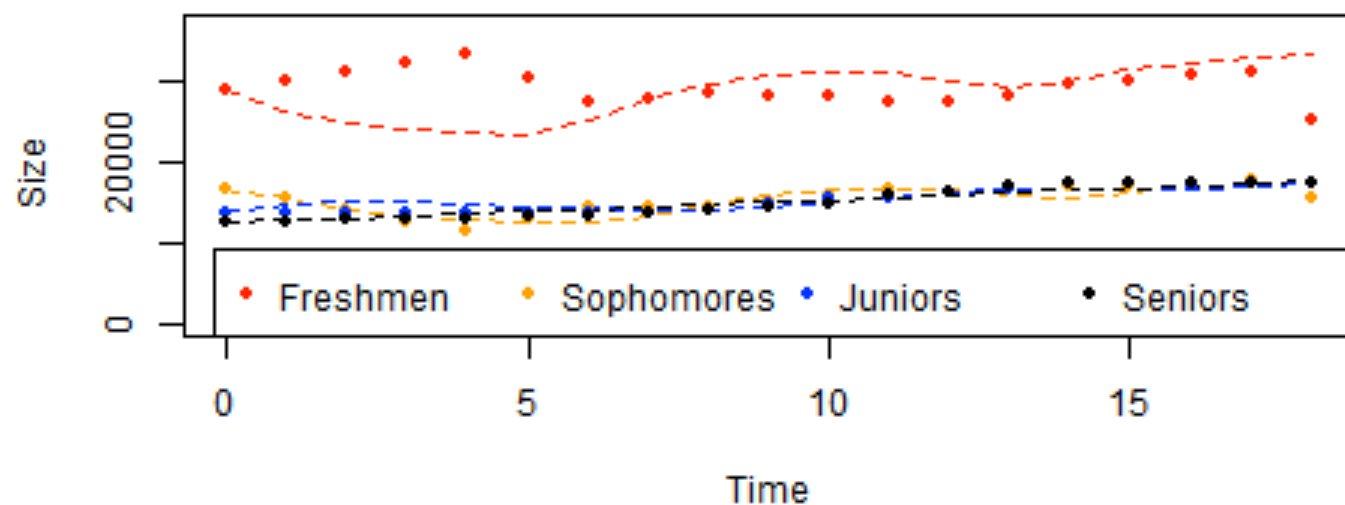
Washington Model 2 Groups



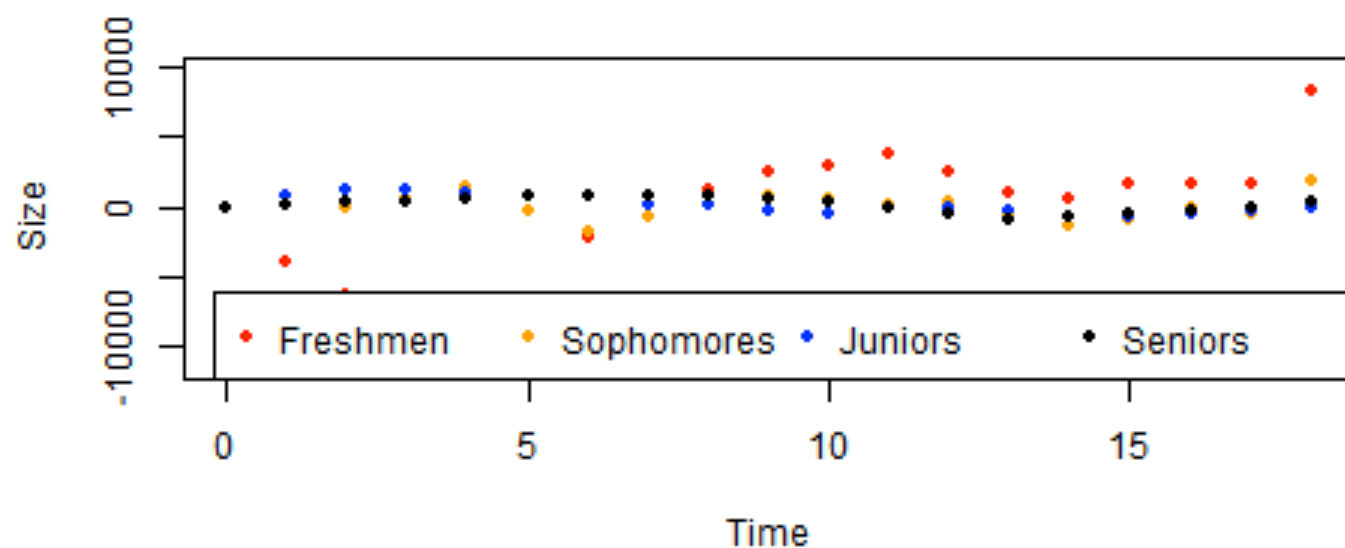
Washington Model 2 Residuals



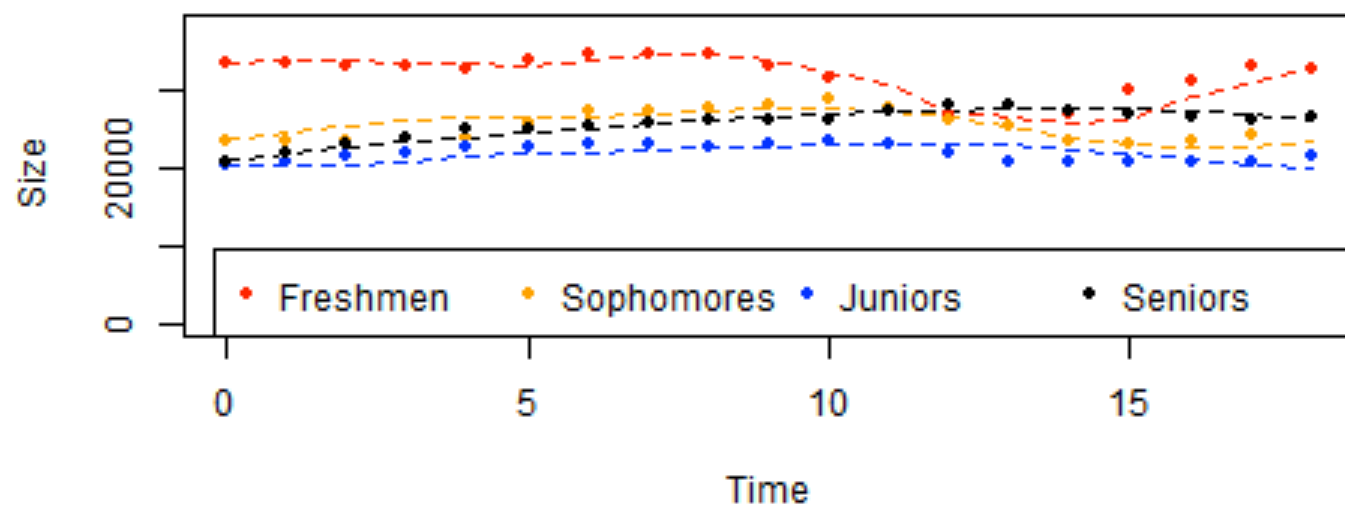
WashingtonDC Model 2 Groups



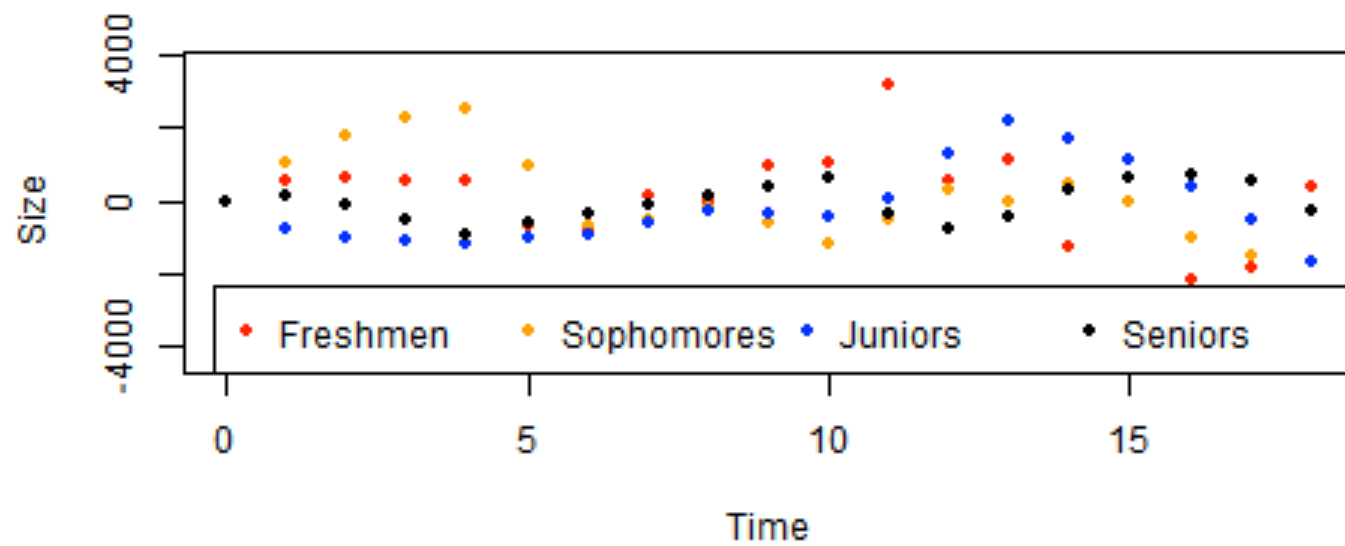
WashingtonDC Model 2 Residuals



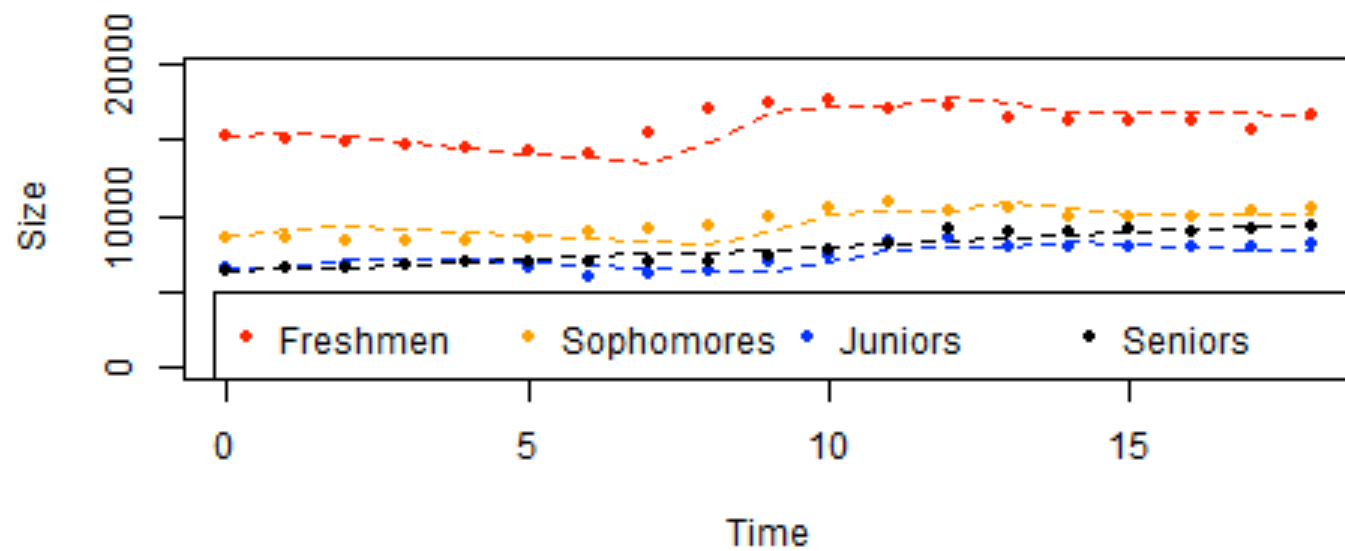
WestVirginia Model 2 Groups



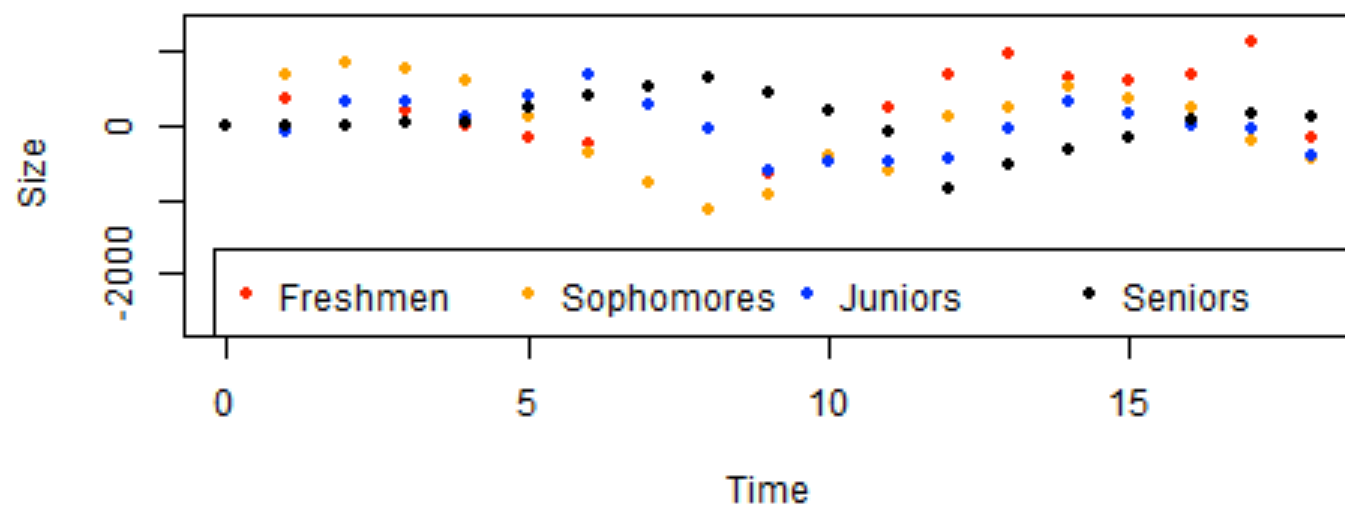
WestVirginia Model 2 Residuals



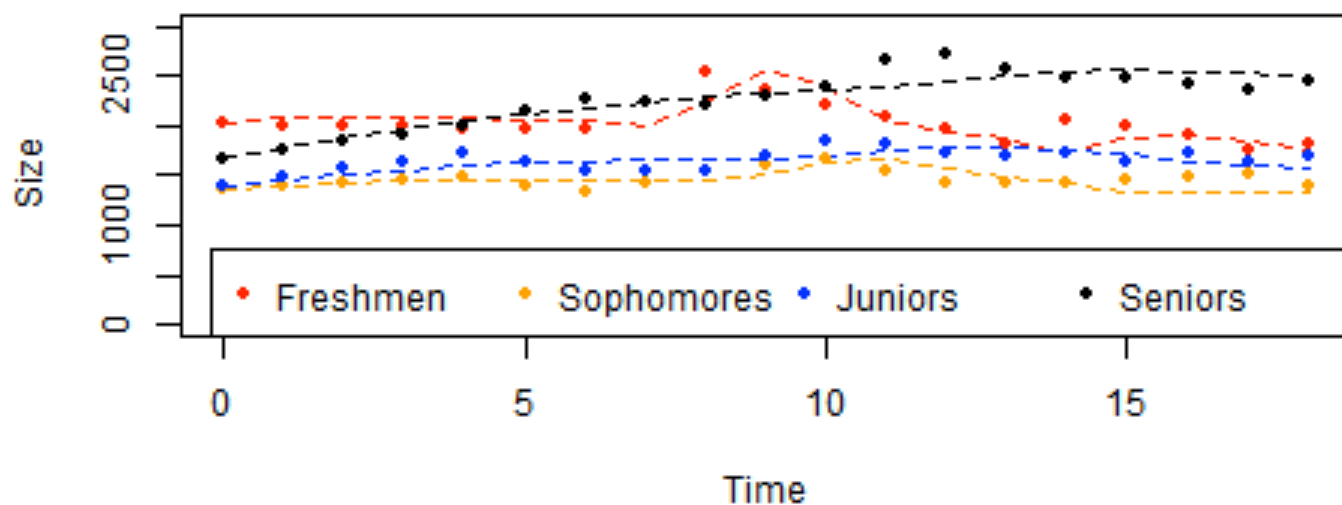
Wisconsin Model 2 Groups



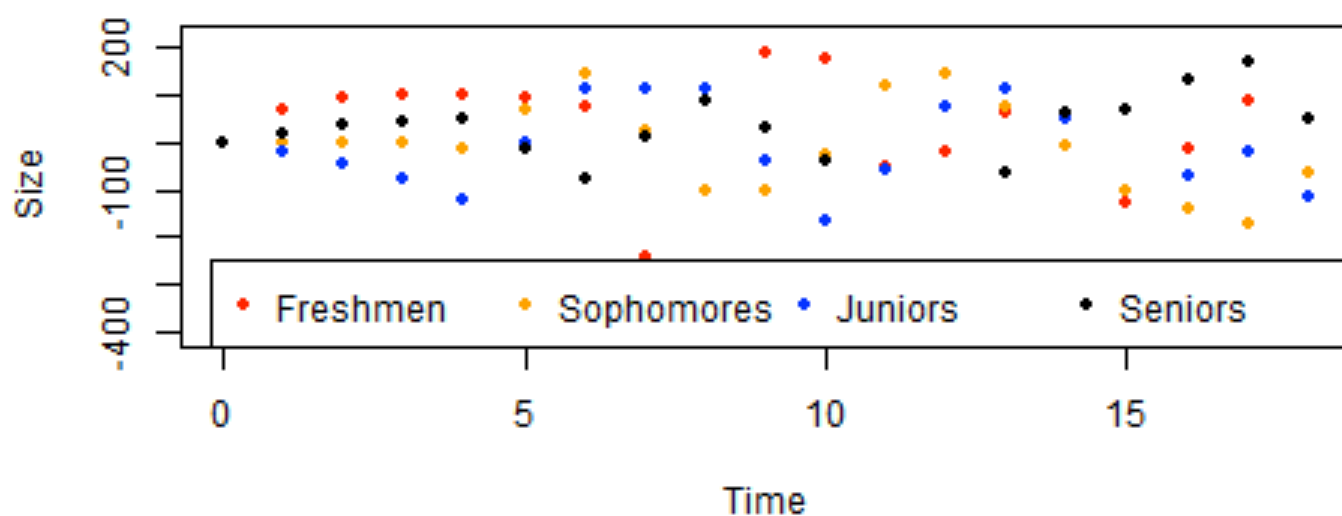
Wisconsin Model 2 Residuals



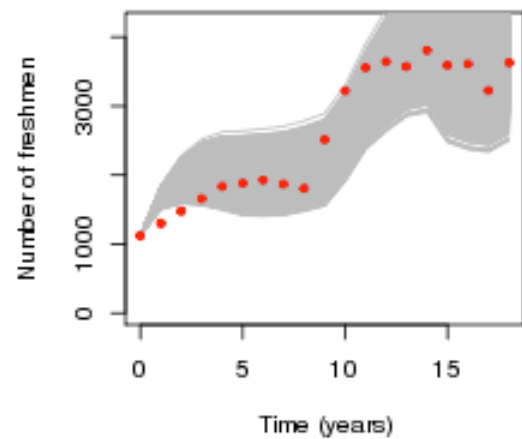
Wyoming Model 2 Groups



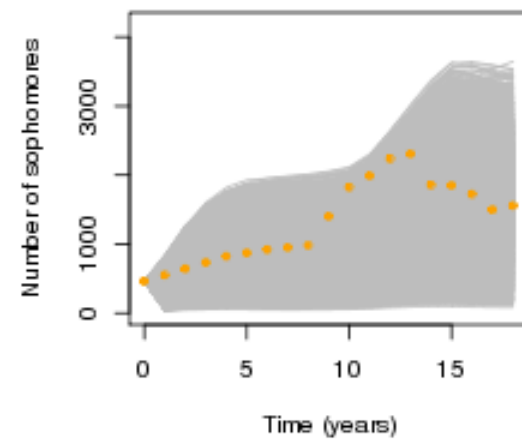
Wyoming Model 2 Residuals



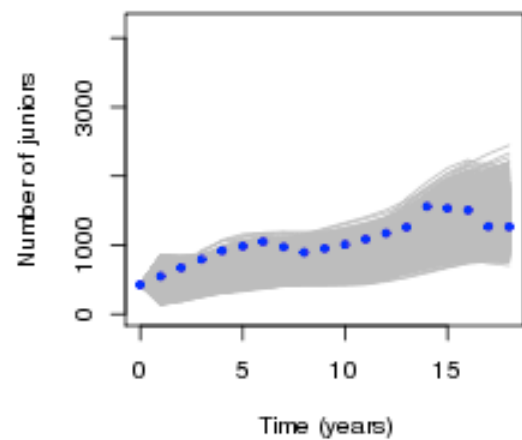
Alabama



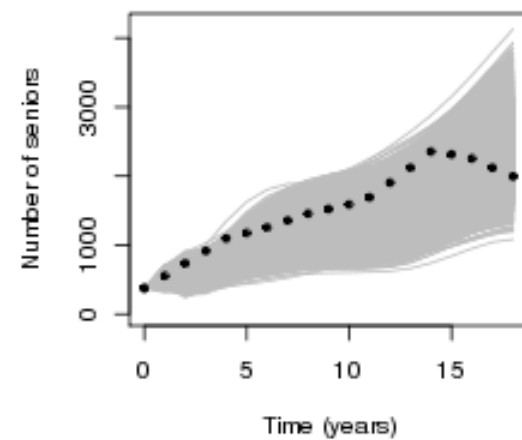
Alabama



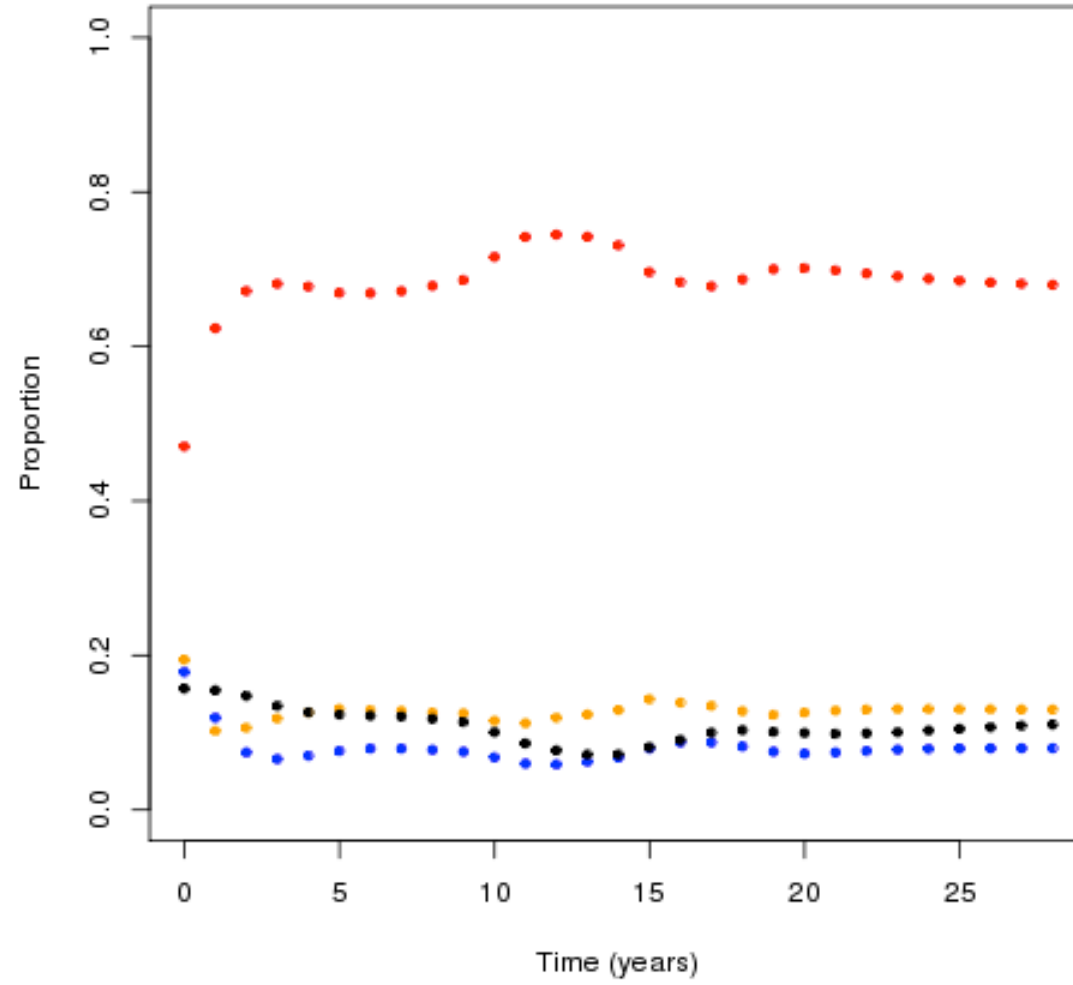
Alabama



Alabama

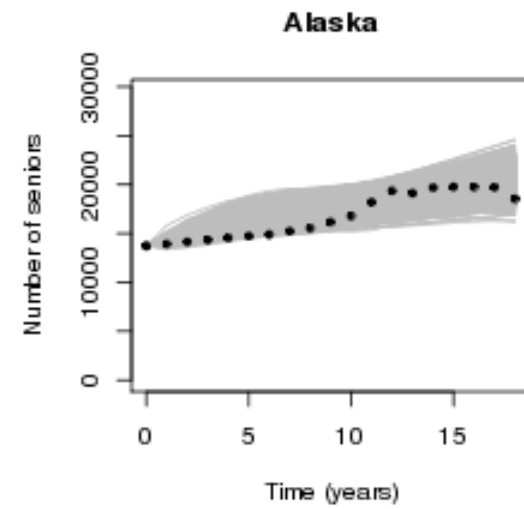
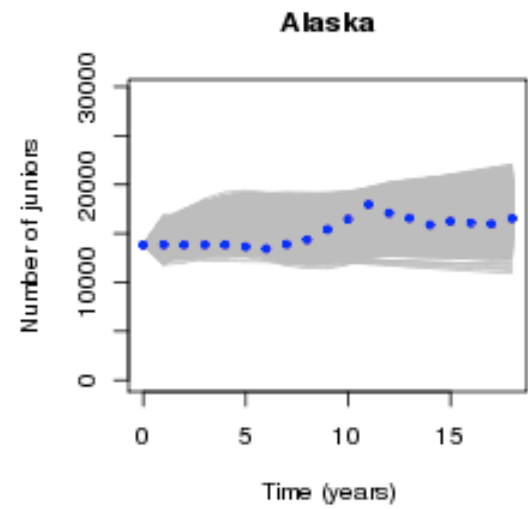
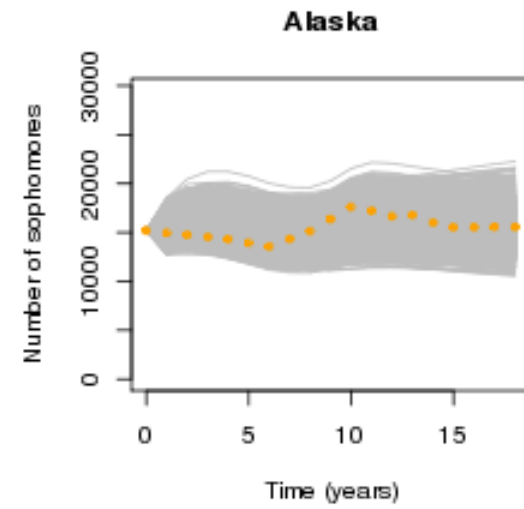
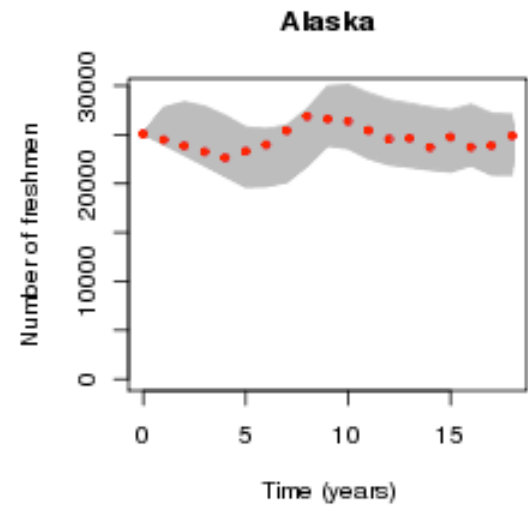


Alabama Ten Year Forecast

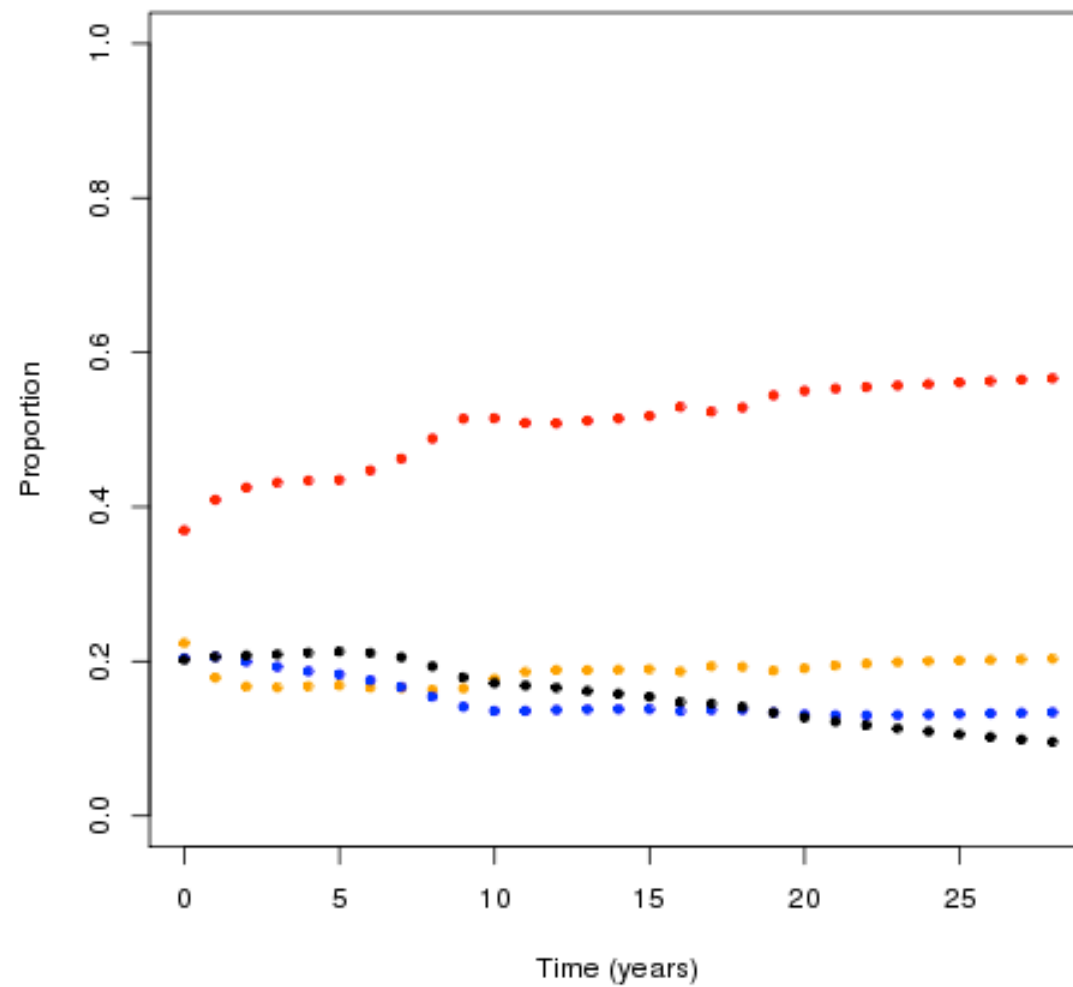


Alabama

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.3179	0.5835	0.4398	0.5611	0.2705	0.3083	0.7939
<i>Standard Errors</i>	0.1246	0.2506	0.326	0.0415	0.2537	0.3157	0.2342



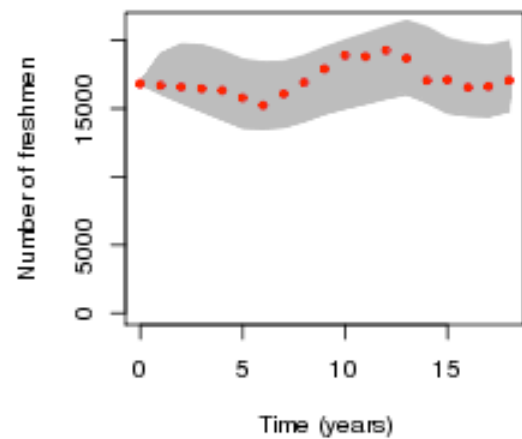
Alaska Ten Year Forecast



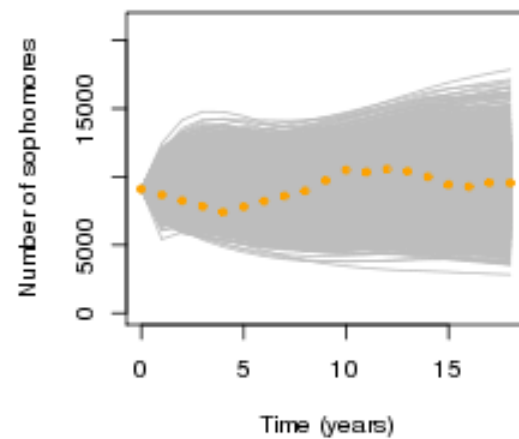
Alaska

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.3751	0.196	0.0814	0.4199	0.3942	0.8212	0.946
<i>Standard Errors</i>	0.1903	0.176	0.0907	0.0204	0.3076	0.1788	0.0864

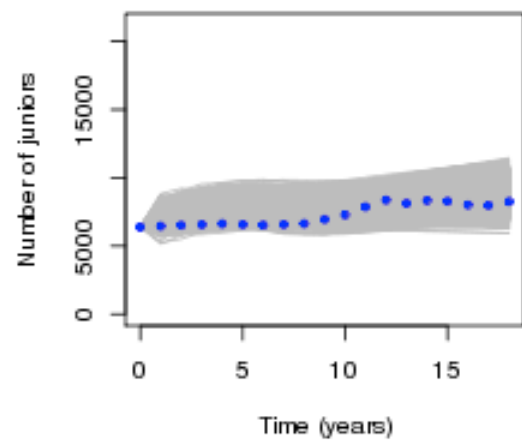
Arizona



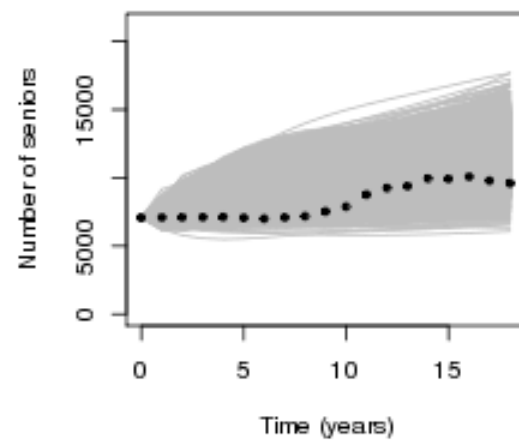
Arizona



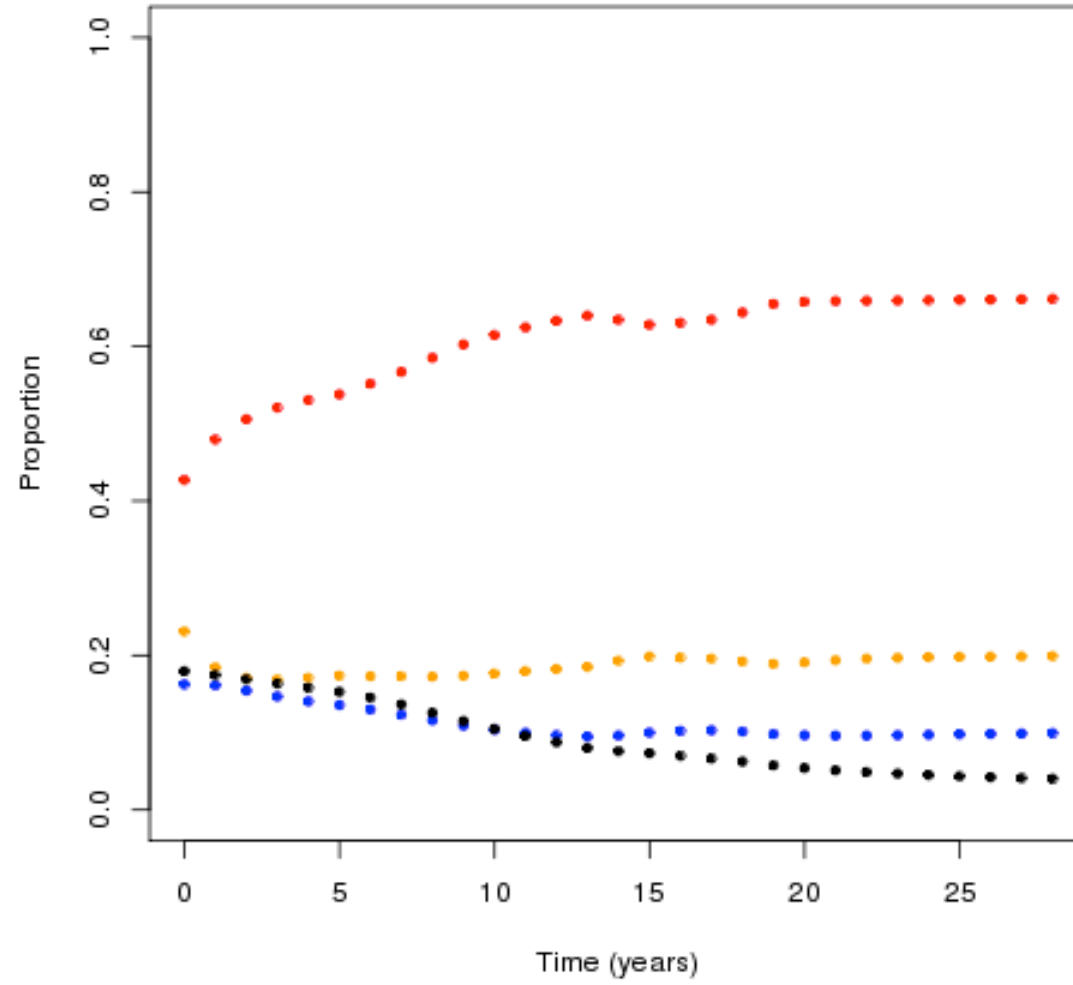
Arizona



Arizona



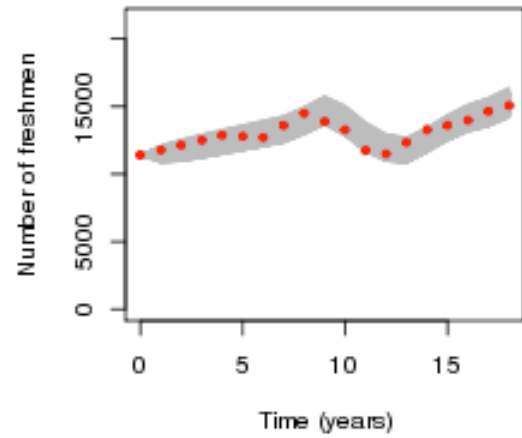
Arizona Ten Year Forecast



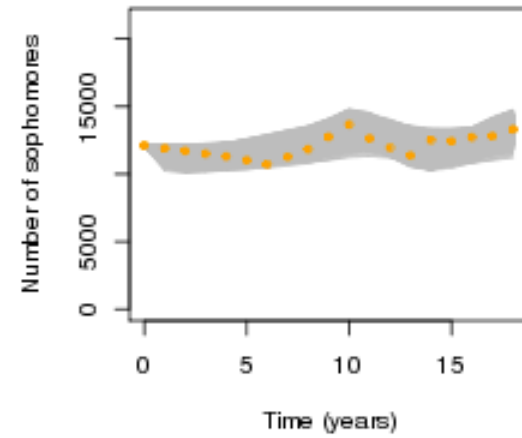
Arizona

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.293	0.1985	0.1771	0.4309	0.4455	0.7818	0.8828
<i>Standard Errors</i>	0.192	0.1609	0.1906	0.0241	0.3544	0.2019	0.1599

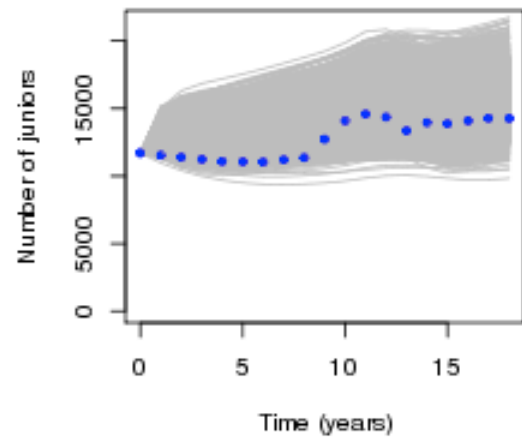
Arkansas



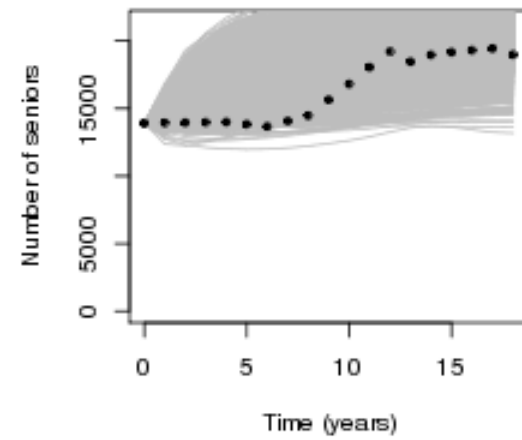
Arkansas



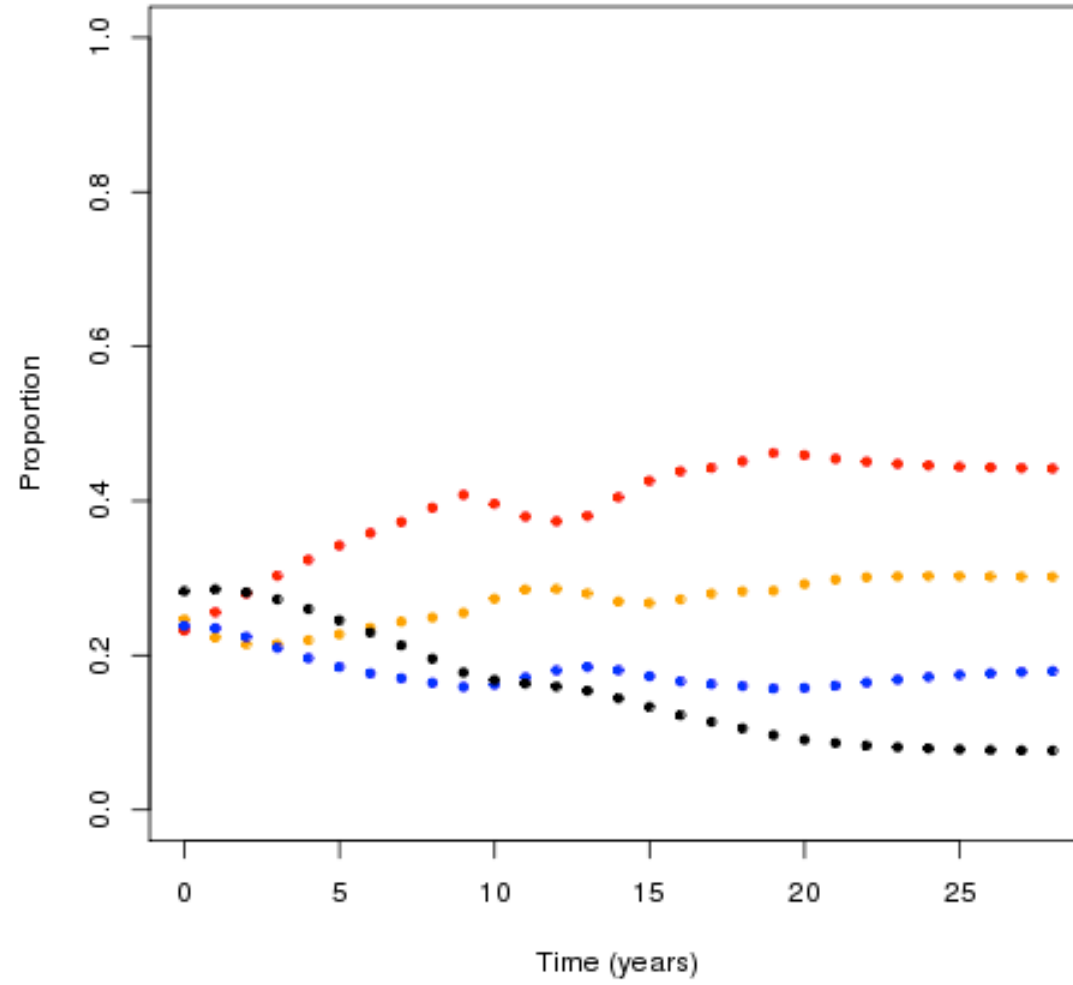
Arkansas



Arkansas



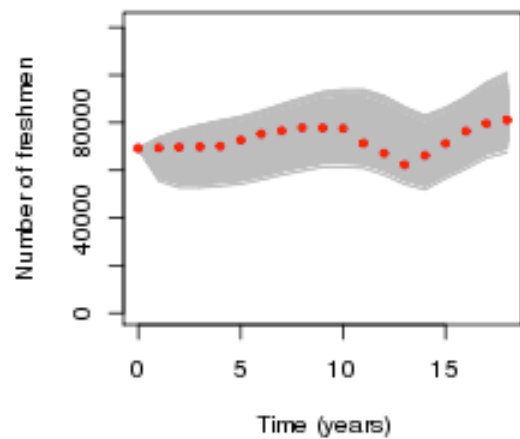
Arkansas Ten Year Forecast



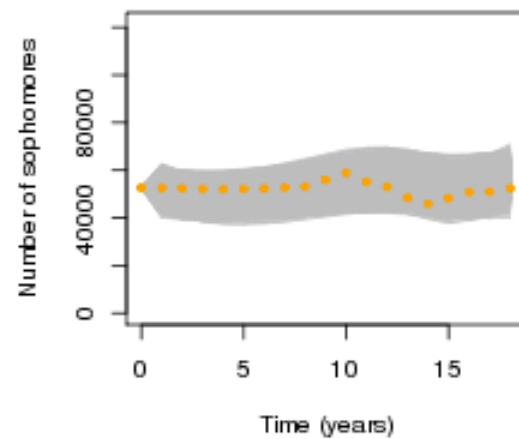
Arkansas

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.4647	0.337	0.1969	0.2853	0.5135	0.7308	0.8746
<i>Standard Errors</i>	0.1671	0.2105	0.172	0.015	0.1756	0.1782	0.1322

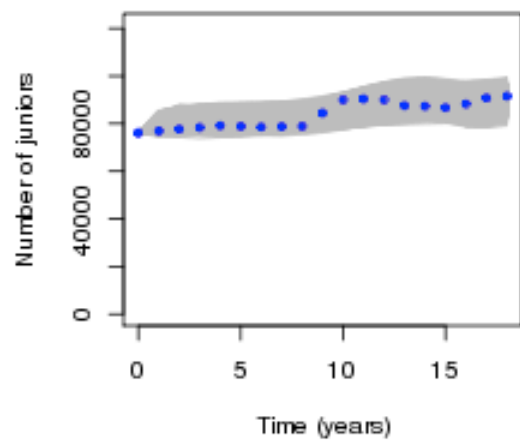
California



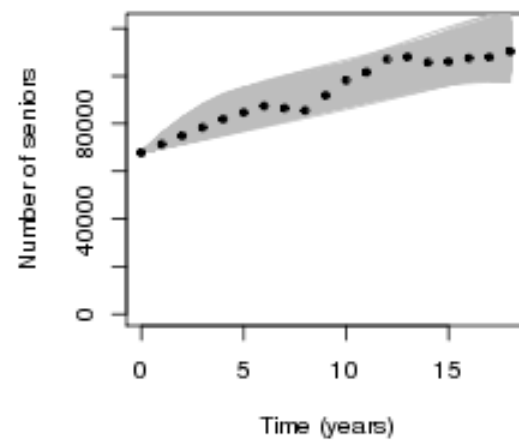
California



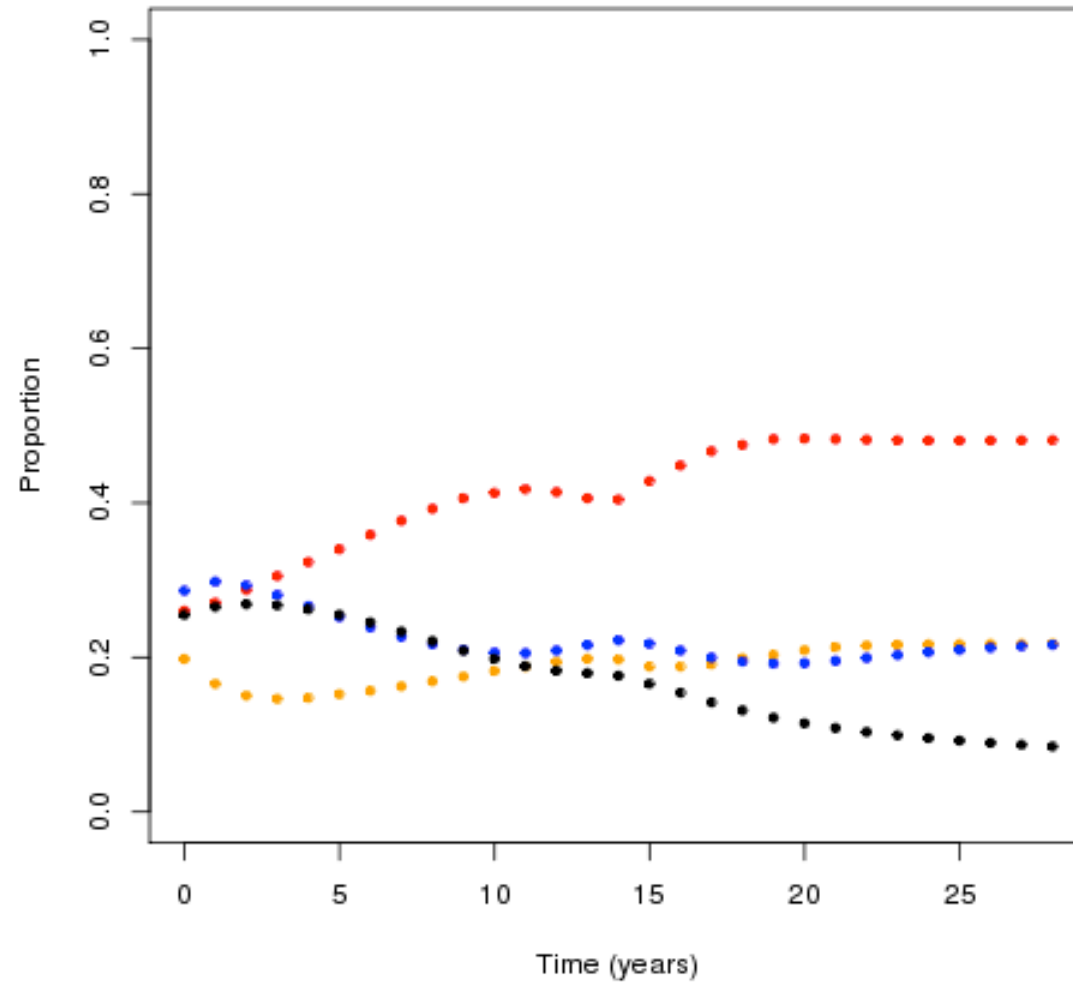
California



California



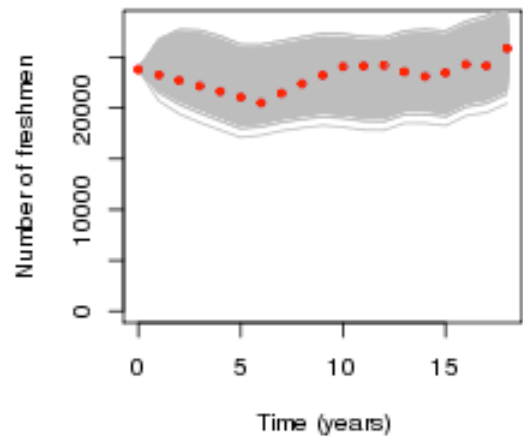
California Ten Year Forecast



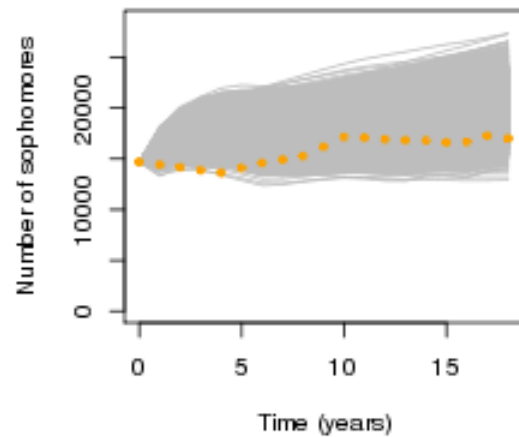
California

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.4442	0.3417	0.1233	0.391	0.4017	0.8005	0.9133
<i>Standard Errors</i>	0.1574	0.1537	0.0675	0.0366	0.2134	0.0965	0.0635

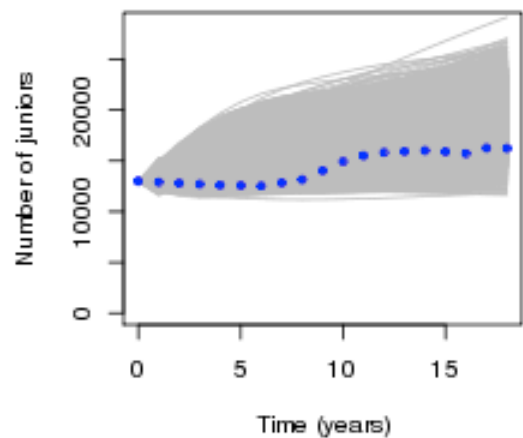
Colorado



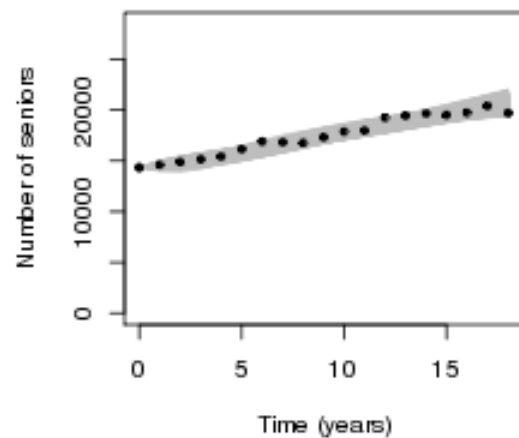
Colorado



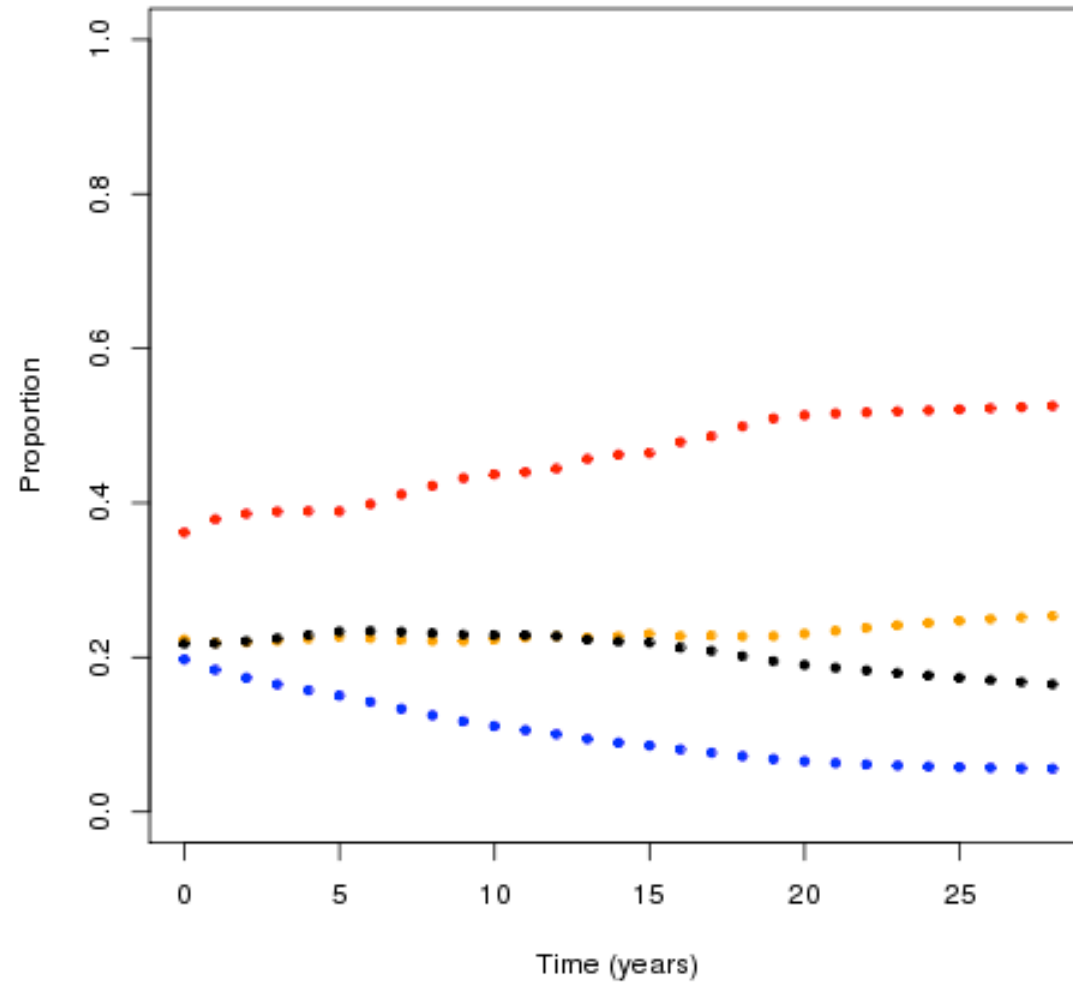
Colorado



Colorado



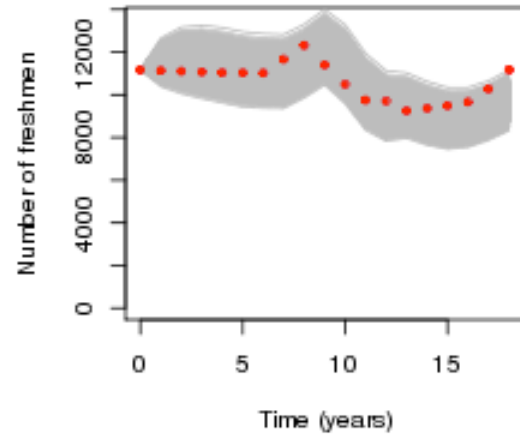
Colorado Ten Year Forecast



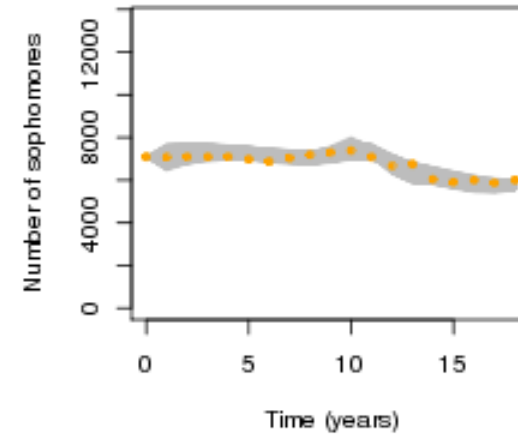
Colorado

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1487	0.119	0.044	0.4015	0.8193	0.8913	0.9791
<i>Standard Errors</i>	0.1175	0.1173	0.0378	0.0315	0.1658	0.1266	0.0364

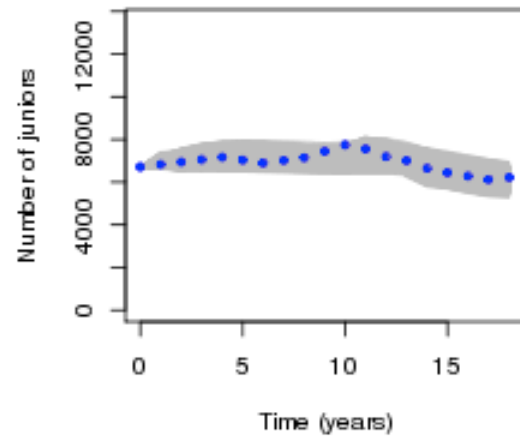
Connecticut



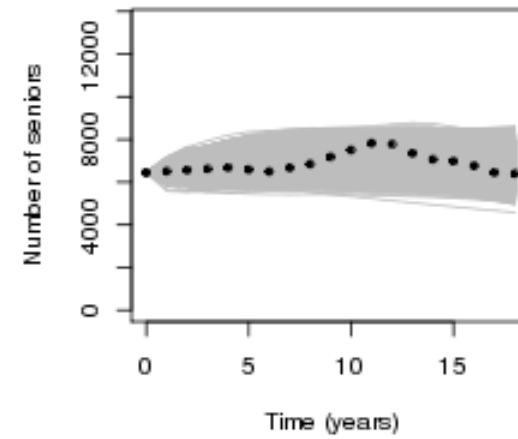
Connecticut



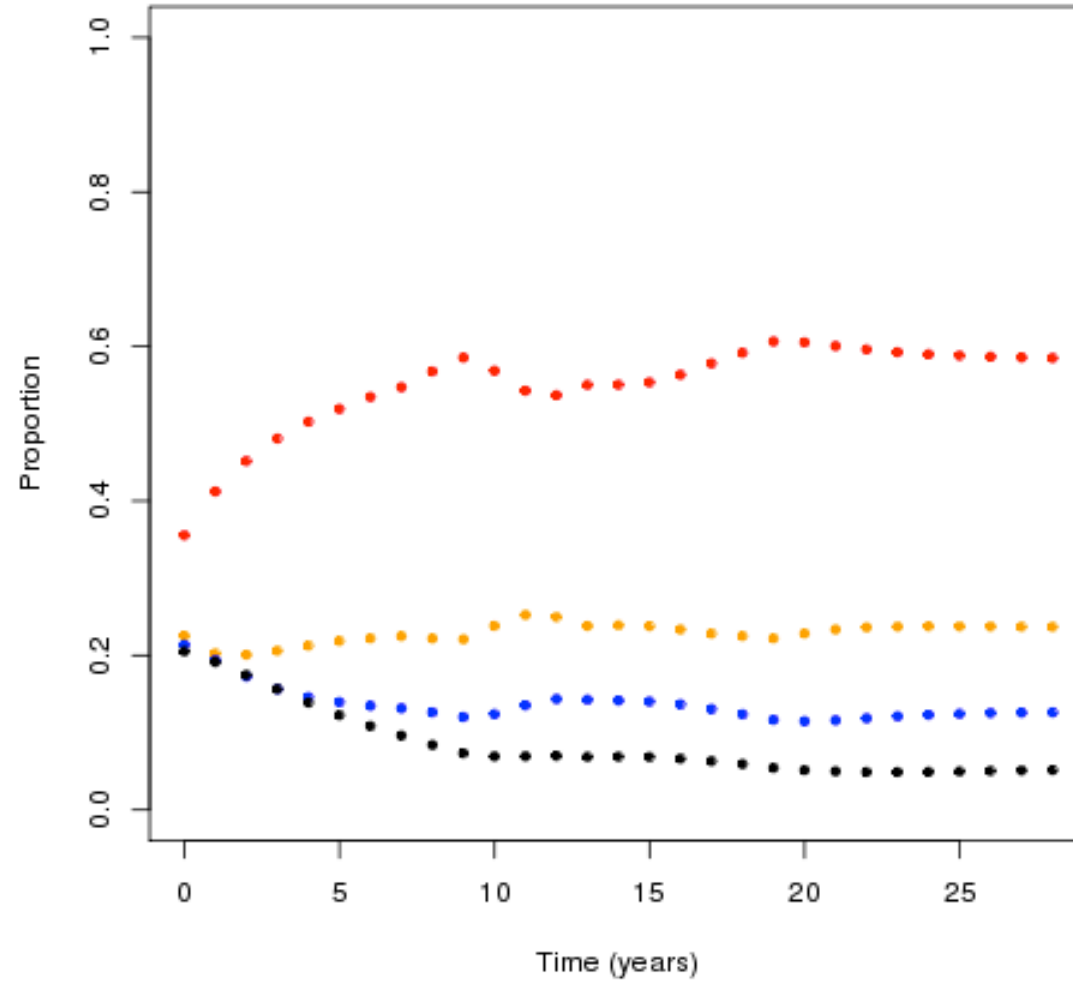
Connecticut



Connecticut



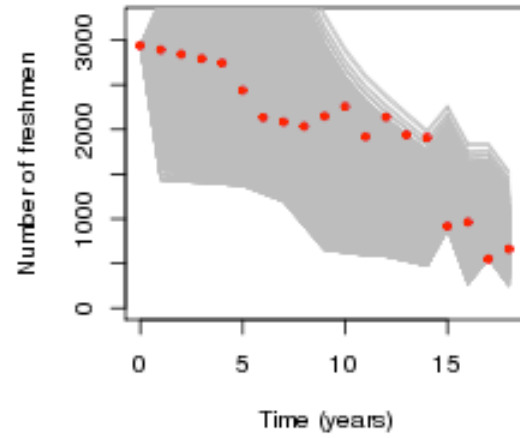
Connecticut Ten Year Forecast



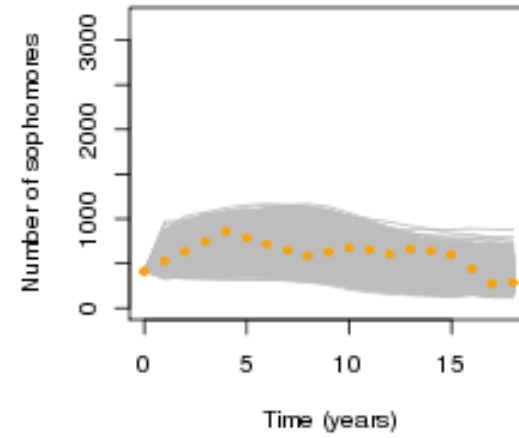
Connecticut

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.3339	0.4263	0.2869	0.359	0.4718	0.5797	0.7136
<i>Standard Errors</i>	0.0767	0.1435	0.1932	0.0264	0.1237	0.1414	0.1976

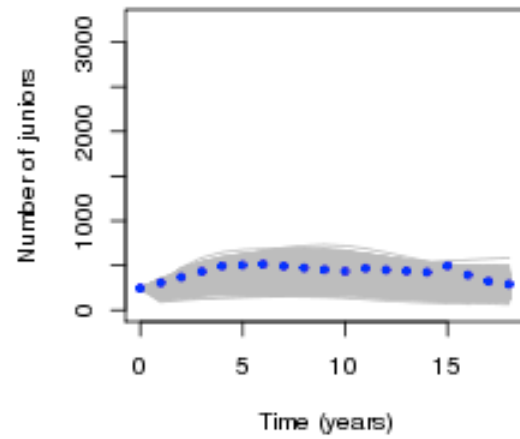
Delaware



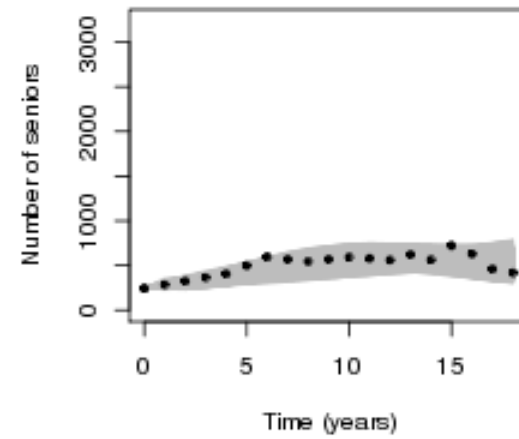
Delaware



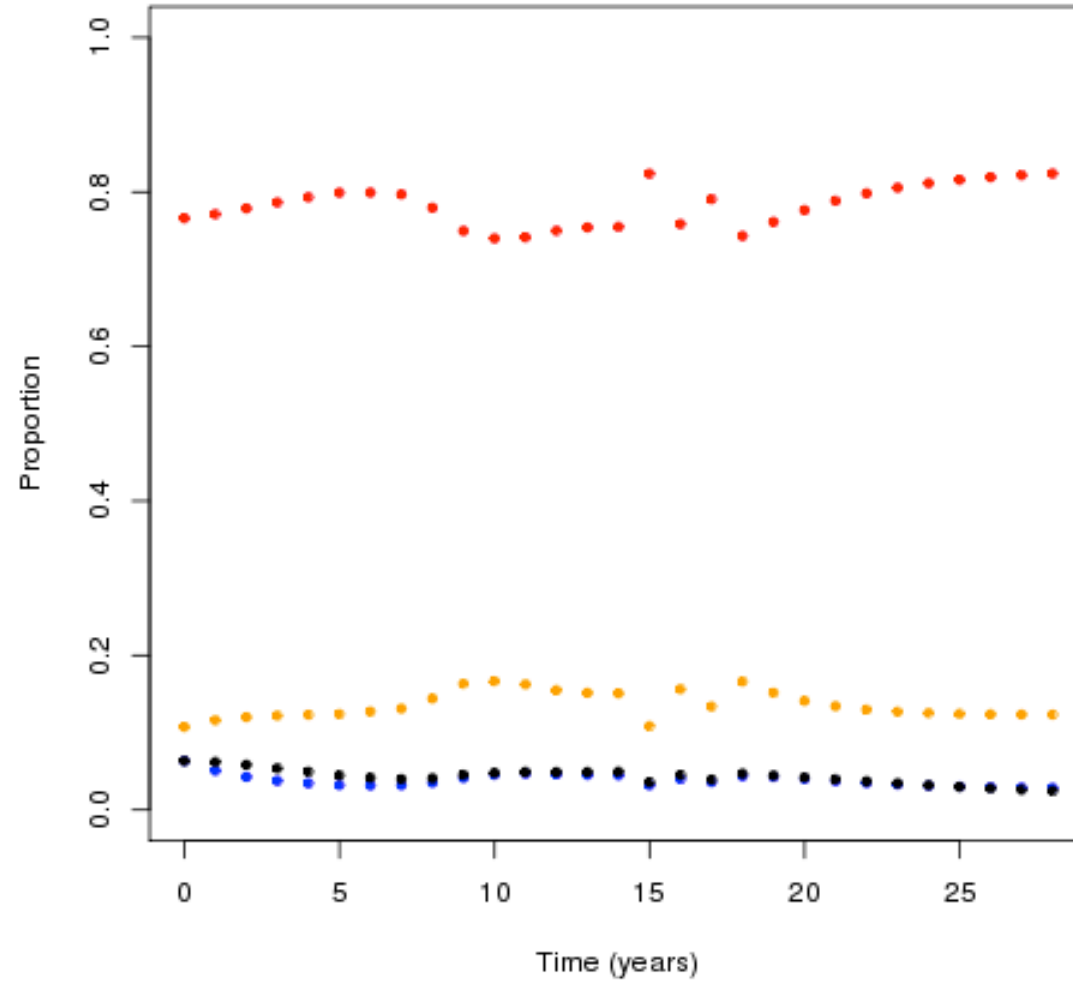
Delaware



Delaware



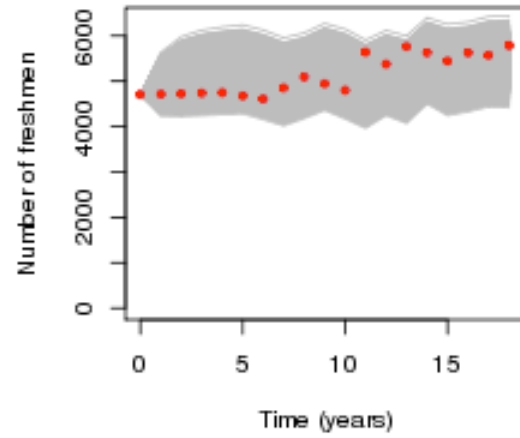
Delaware Ten Year Forecast



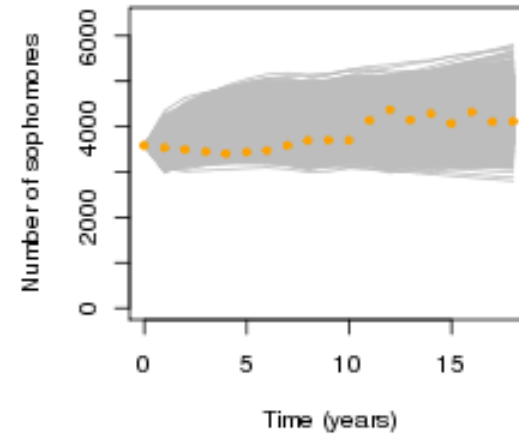
Delaware

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1005	0.2375	0.3028	0.4646	0.6381	0.6129	0.8101
<i>Standard Errors</i>	0.0452	0.0837	0.1075	0.1013	0.1946	0.1517	0.0822

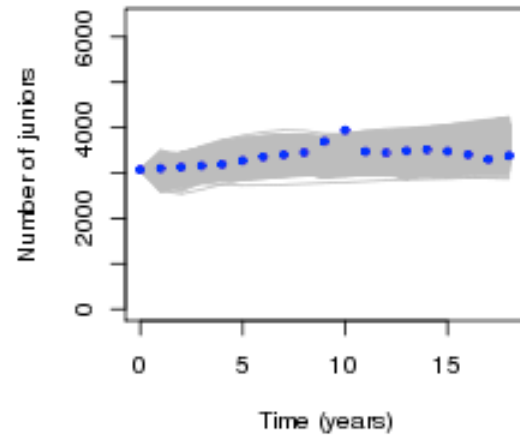
Florida



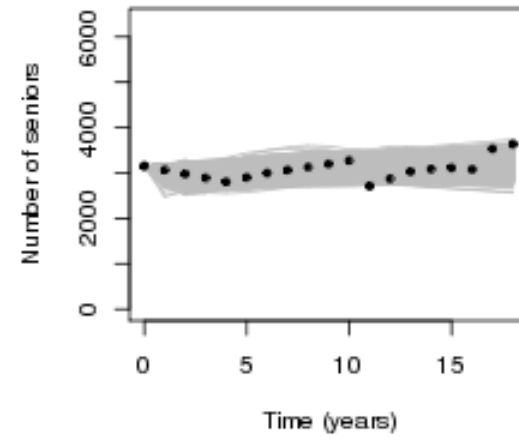
Florida



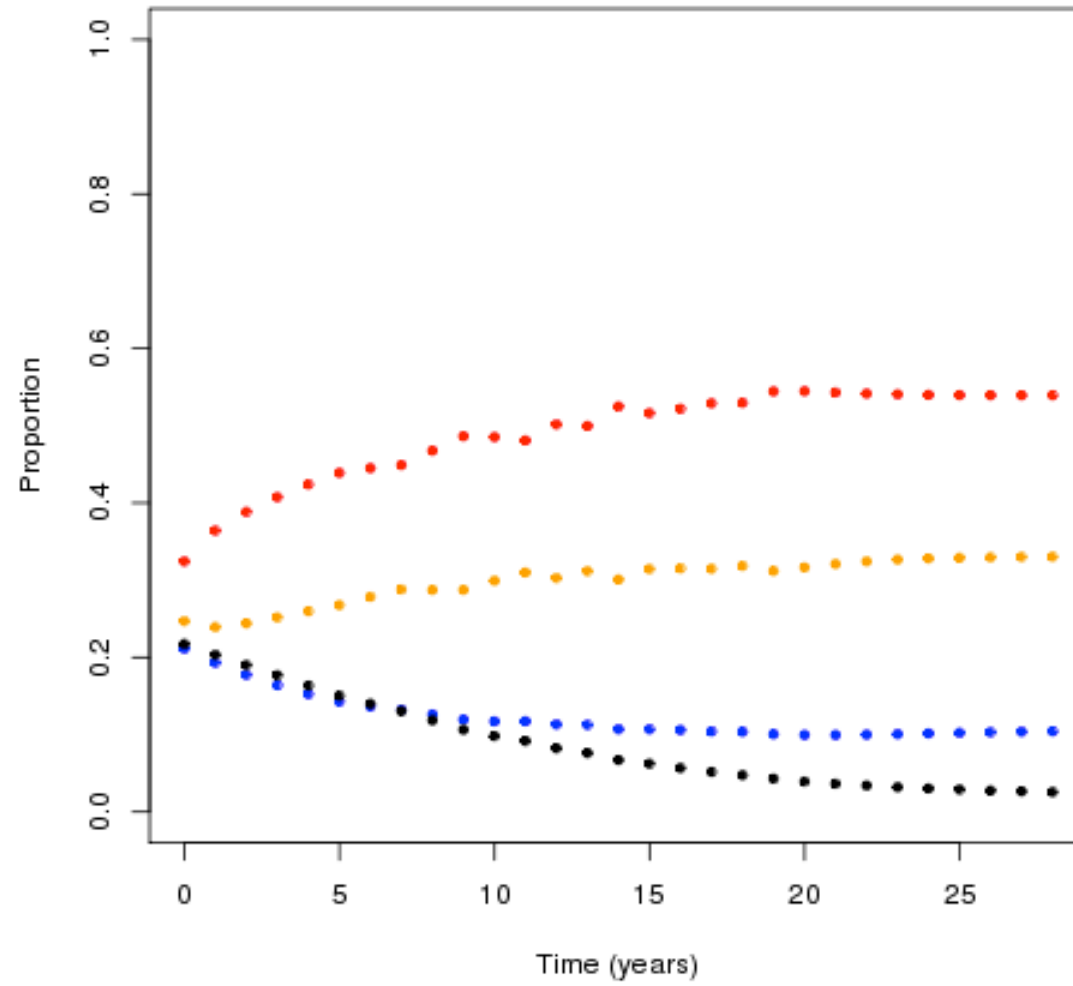
Florida



Florida



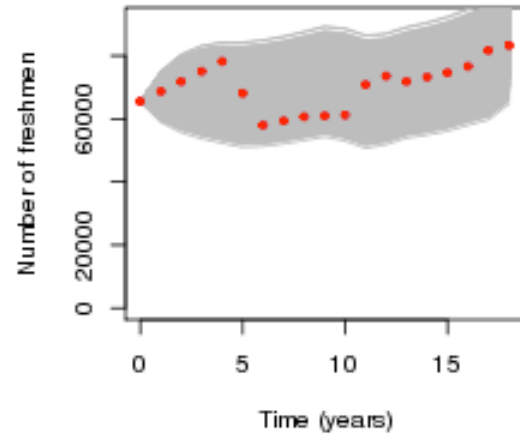
Florida Ten Year Forecast



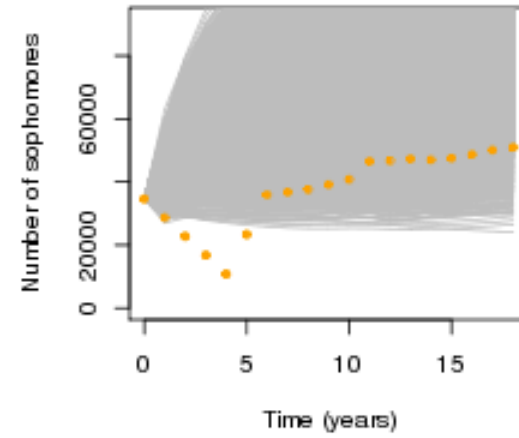
Florida

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2961	0.1757	0.1204	0.2325	0.6295	0.7983	0.8714
<i>Standard Errors</i>	0.2345	0.1849	0.1617	0.0403	0.3069	0.2218	0.1729

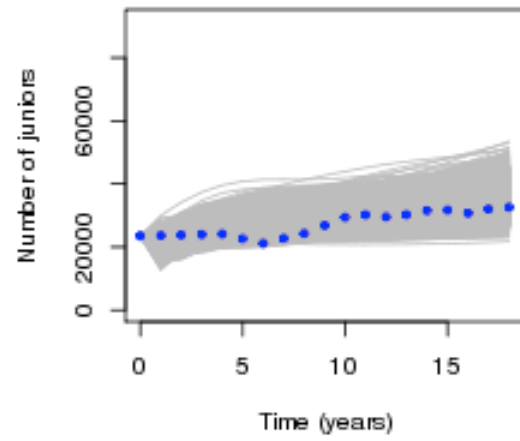
Georgia



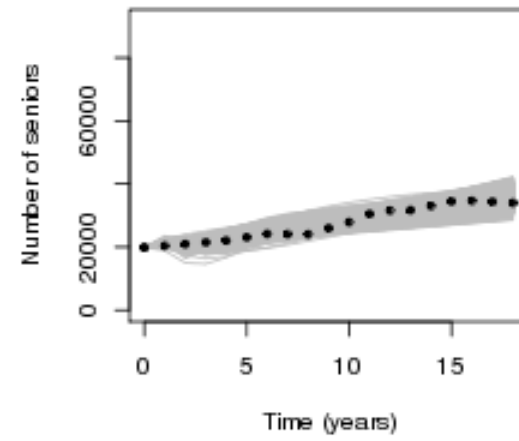
Georgia



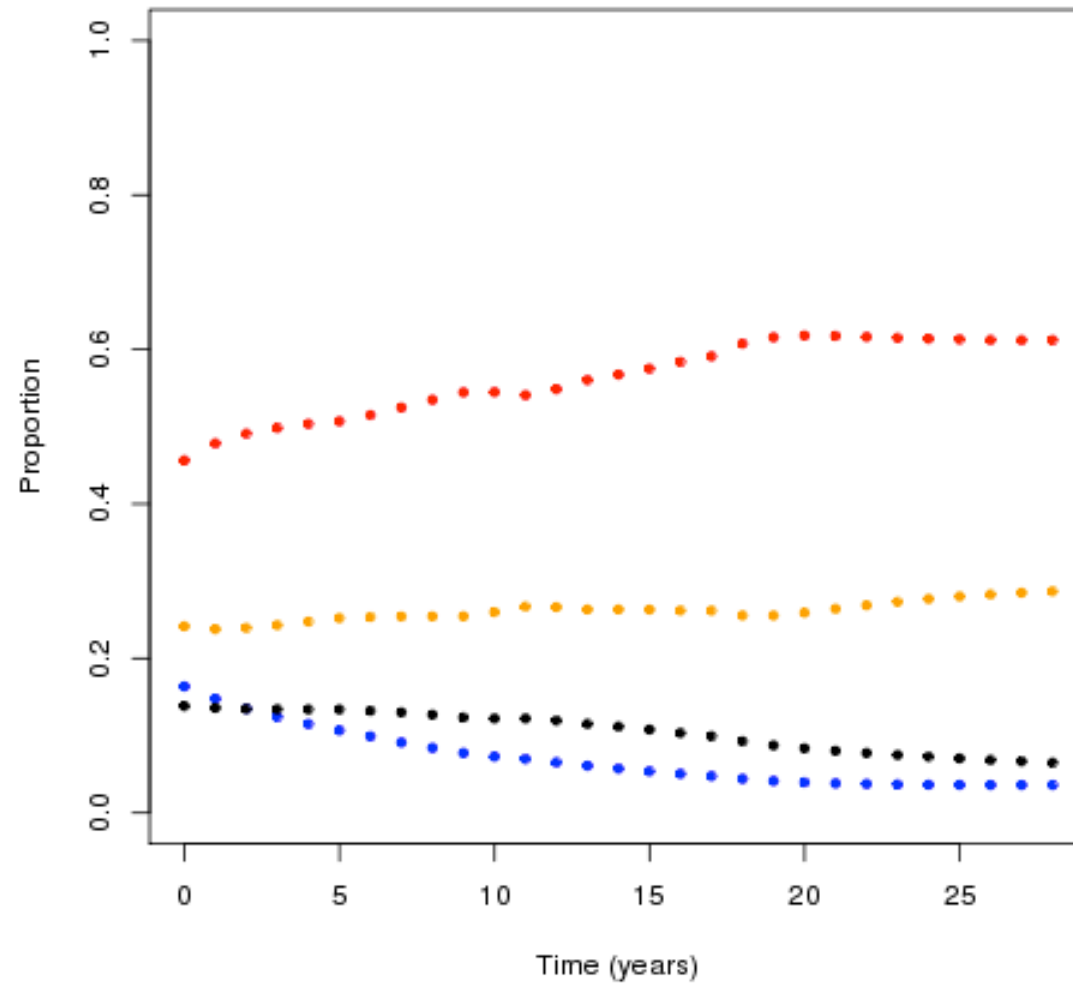
Georgia



Georgia



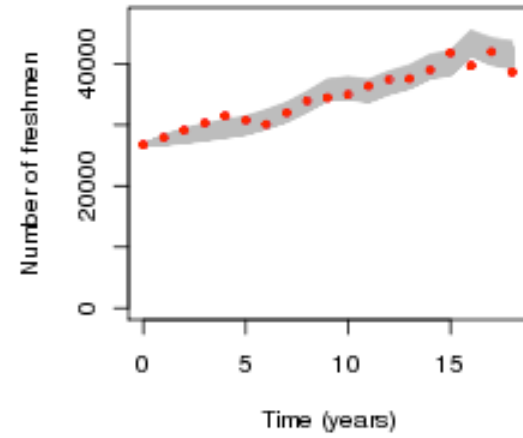
Georgia Ten Year Forecast



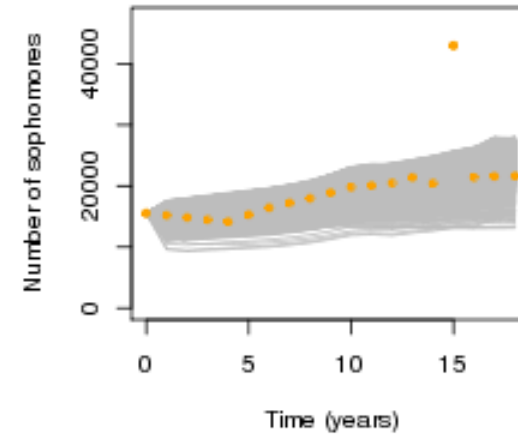
Georgia

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2223	0.0743	0.06	0.5332	0.7839	0.8746	0.9697
<i>Standard Errors</i>	0.1626	0.103	0.0721	0.0343	0.2058	0.1882	0.0783

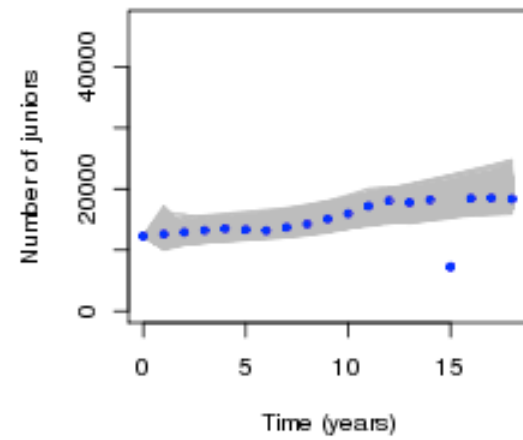
Hawaii



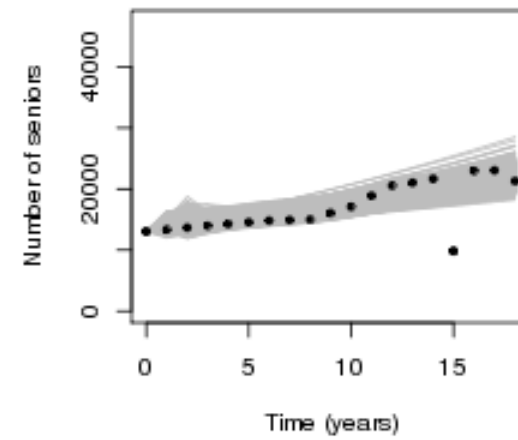
Hawaii



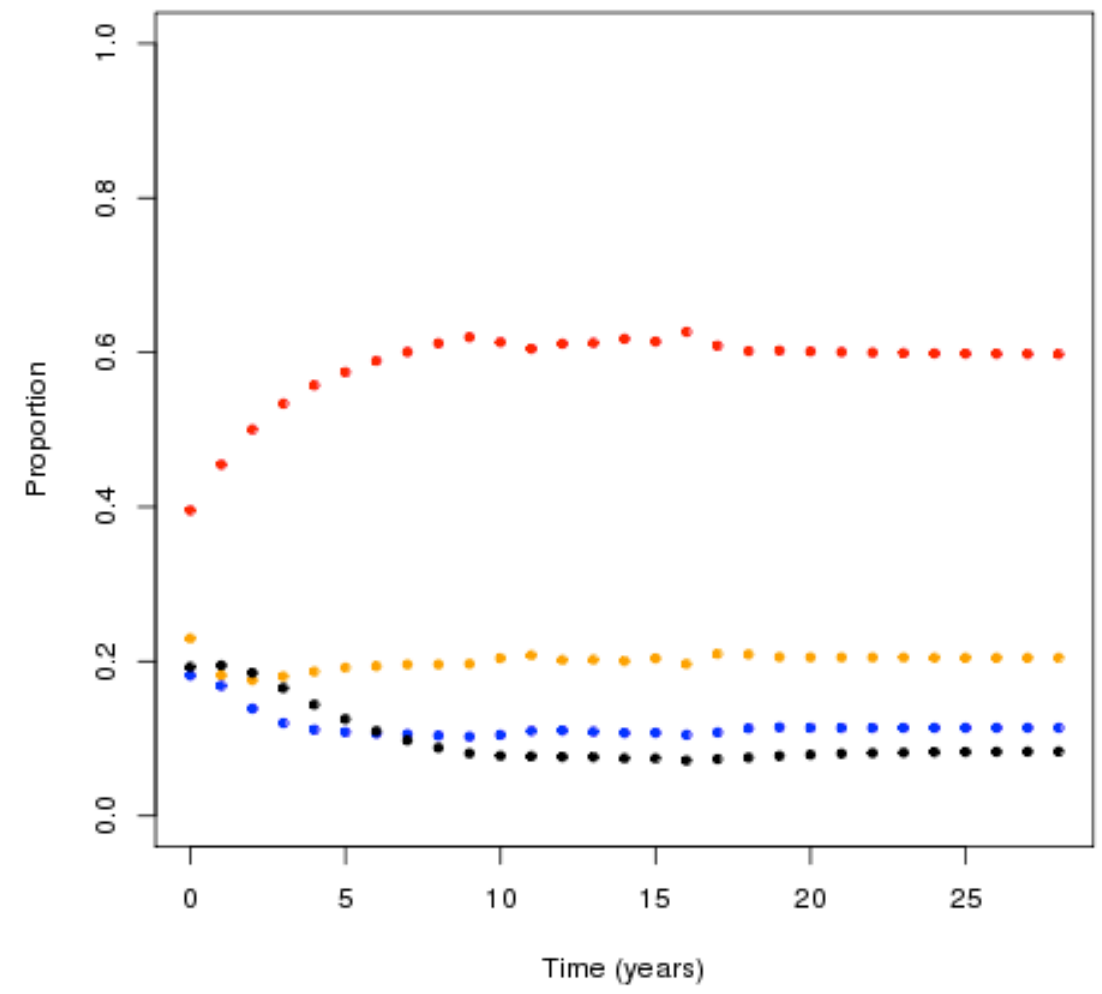
Hawaii



Hawaii

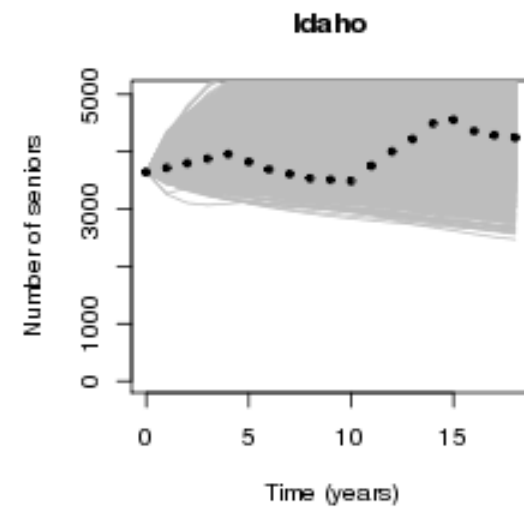
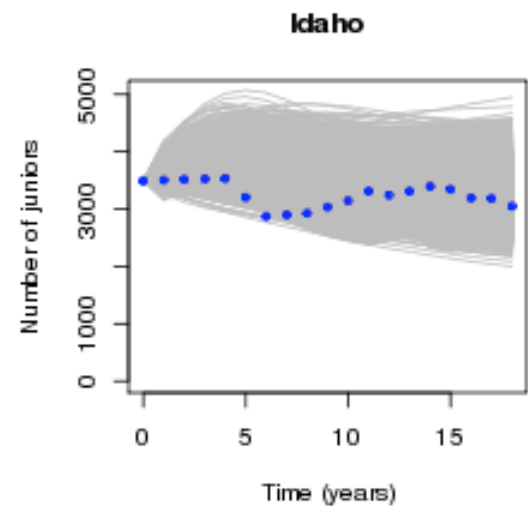
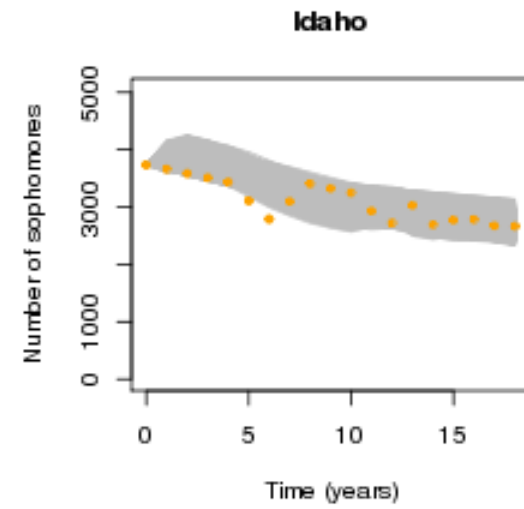
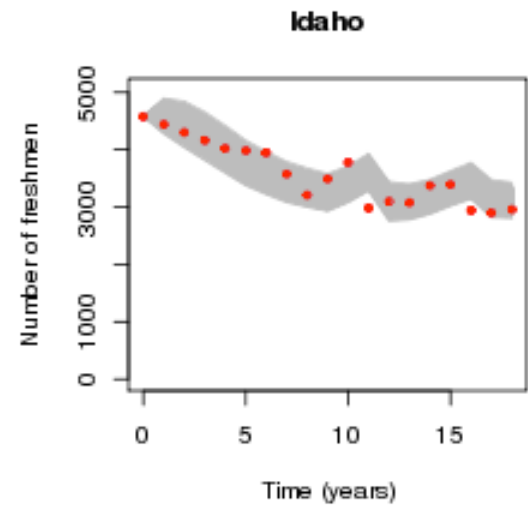


Hawaii Ten Year Forecast

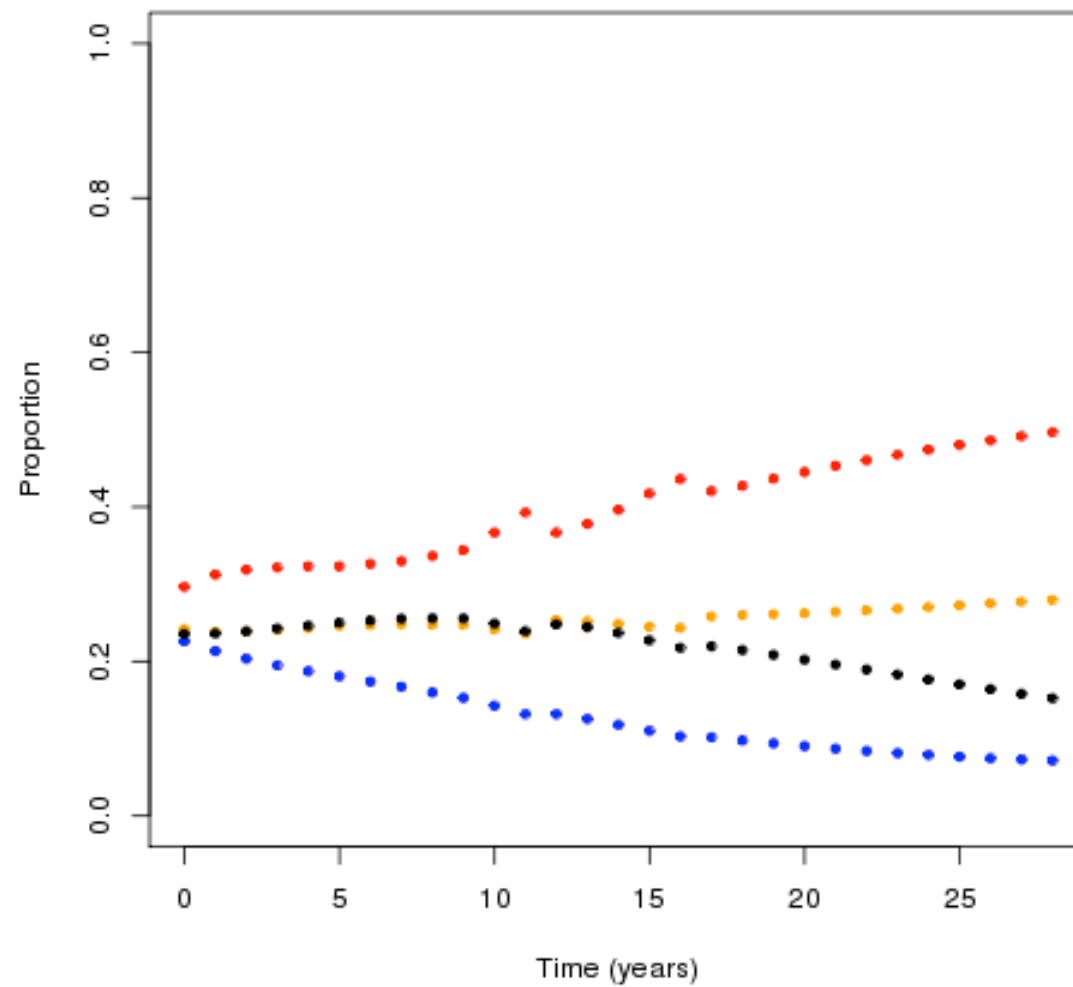


Hawaii

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.427	0.4584	0.4024	0.4271	0.2852	0.4117	0.6773
<i>Standard Errors</i>	0.182	0.2834	0.3695	0.0076	0.3135	0.3755	0.3215

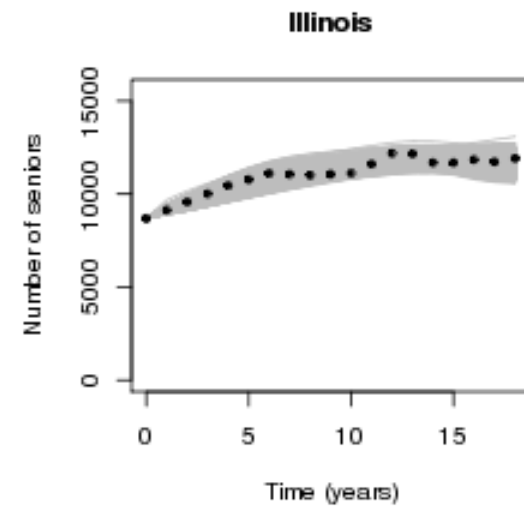
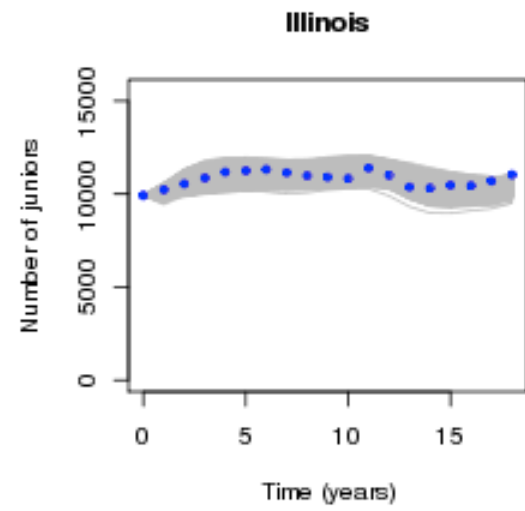
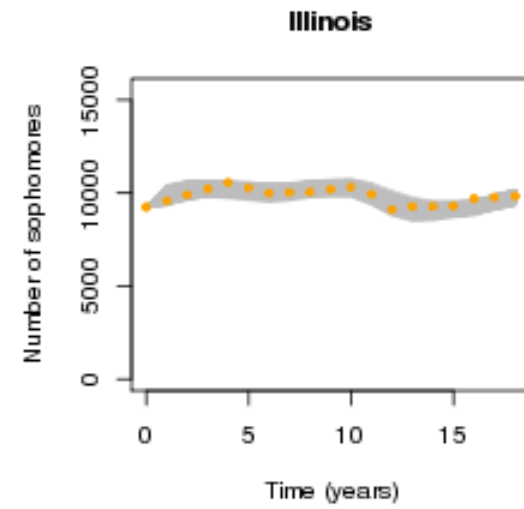
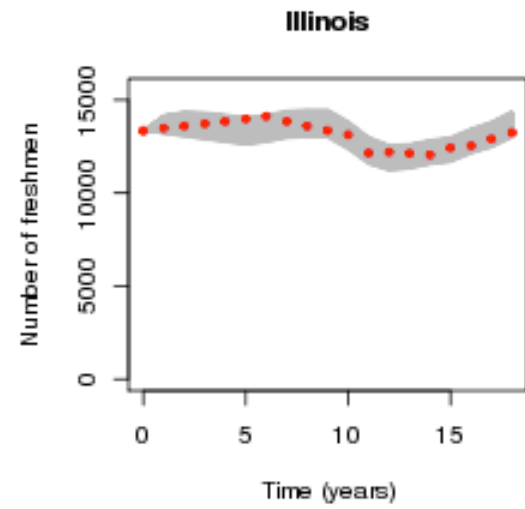


Idaho Ten Year Forecast

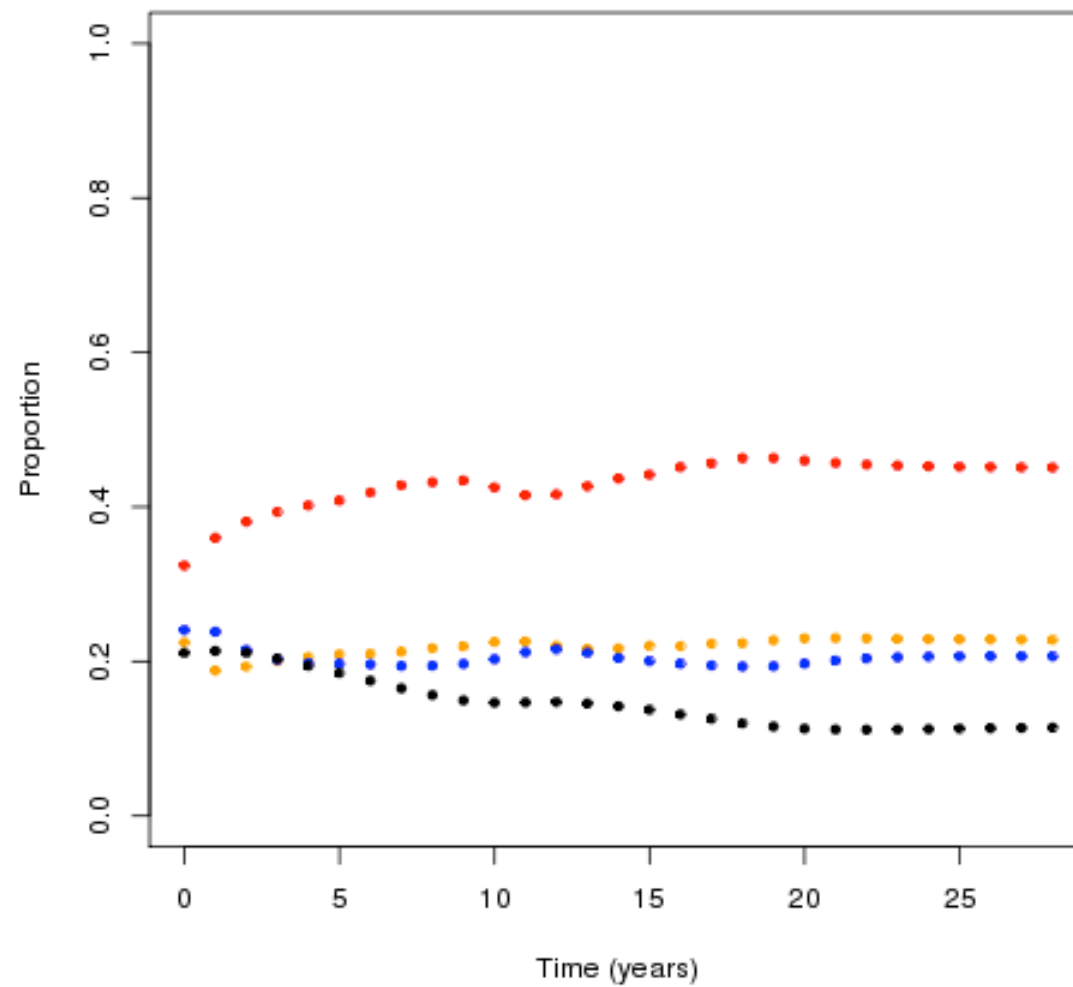


Idaho

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1534	0.1317	0.0747	0.3039	0.8081	0.8732	0.9478
<i>Standard Errors</i>	0.1635	0.1596	0.1069	0.0168	0.186	0.1509	0.0894



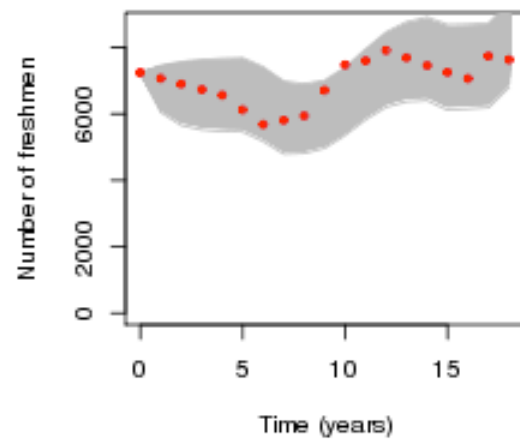
Illinois Ten Year Forecast



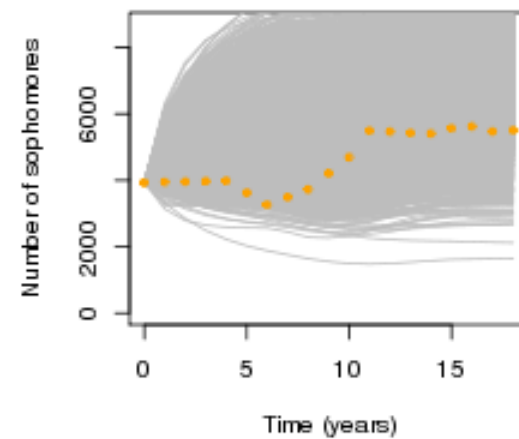
Illinois

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.6123	0.5664	0.188	0.3208	0.1777	0.486	0.8291
<i>Standard Errors</i>	0.0837	0.1862	0.0584	0.0095	0.1145	0.1706	0.0584

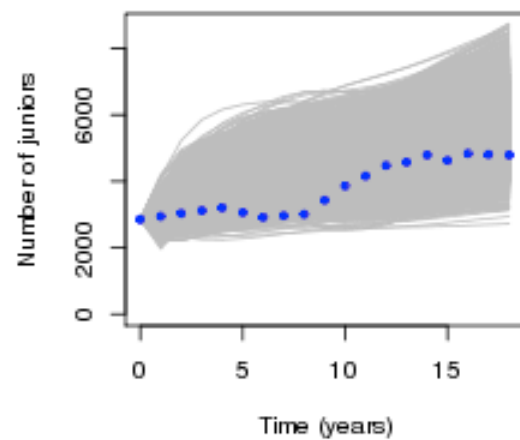
Indiana



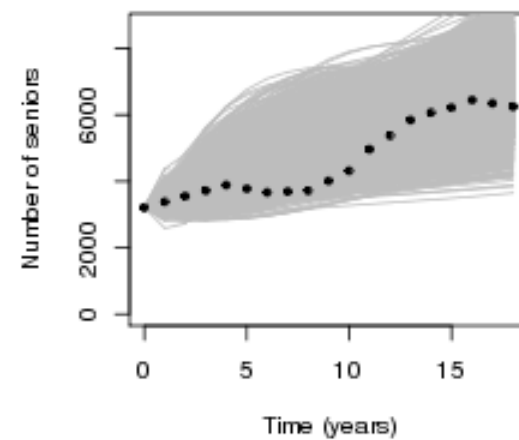
Indiana



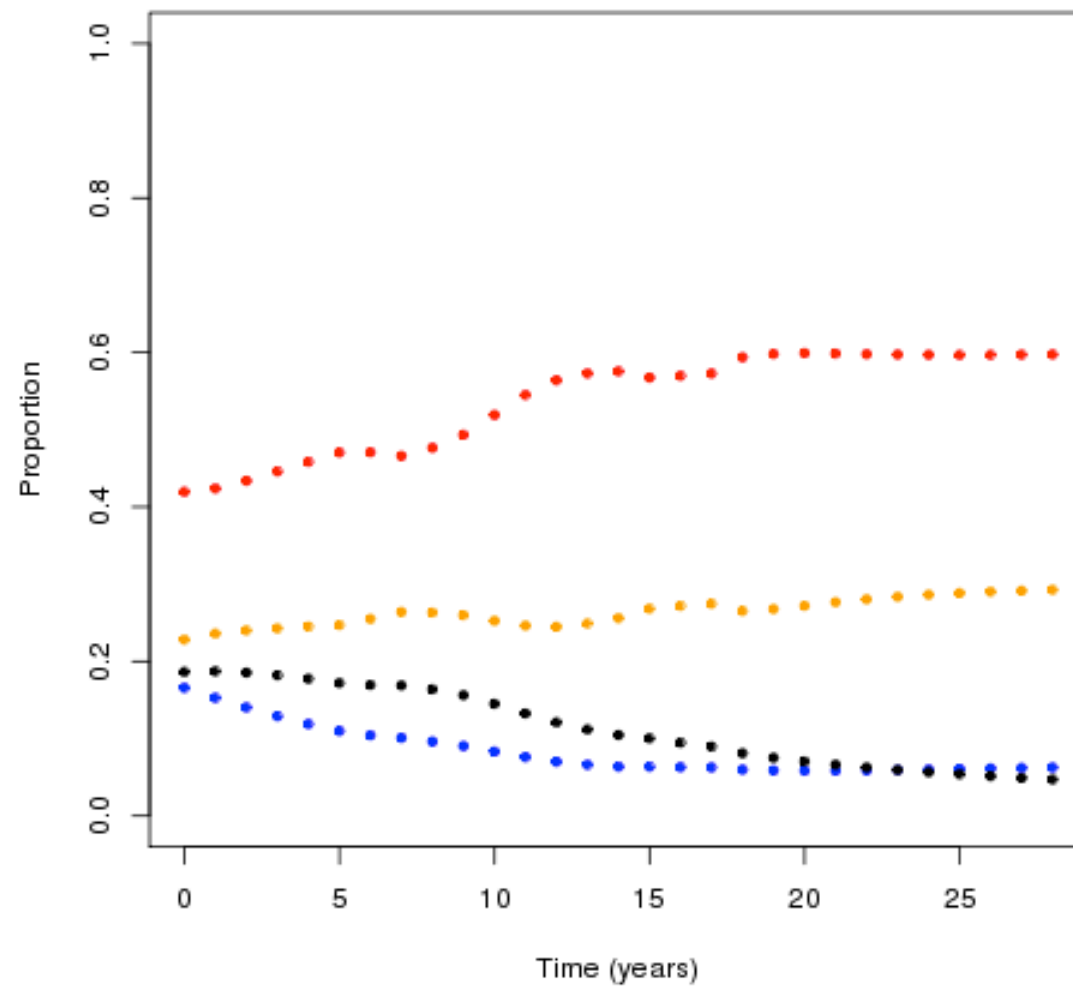
Indiana



Indiana

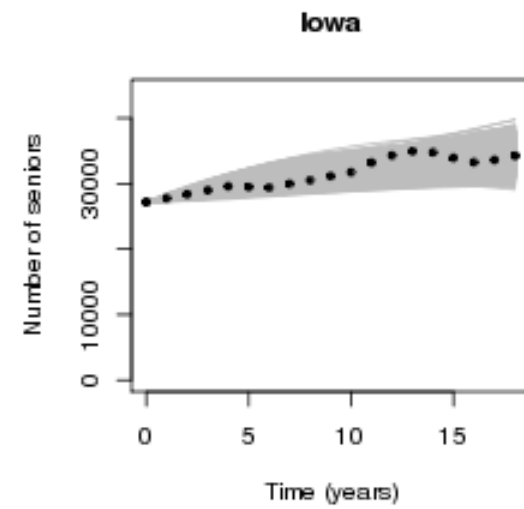
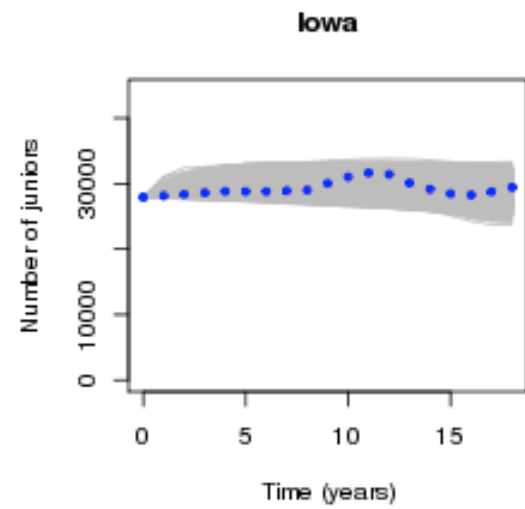
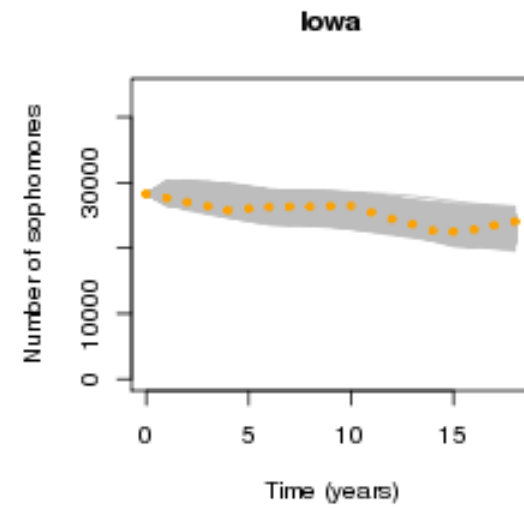
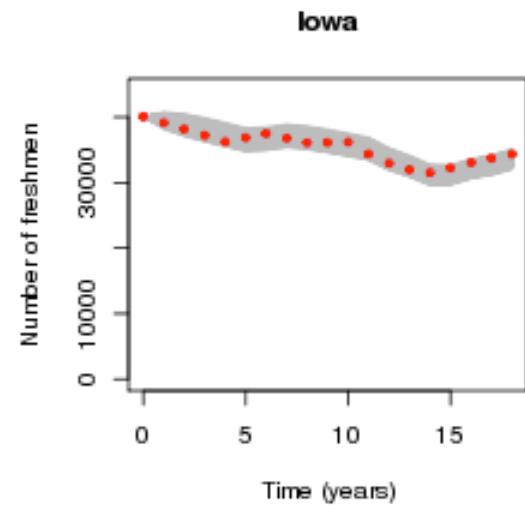


Indiana Ten Year Forecast

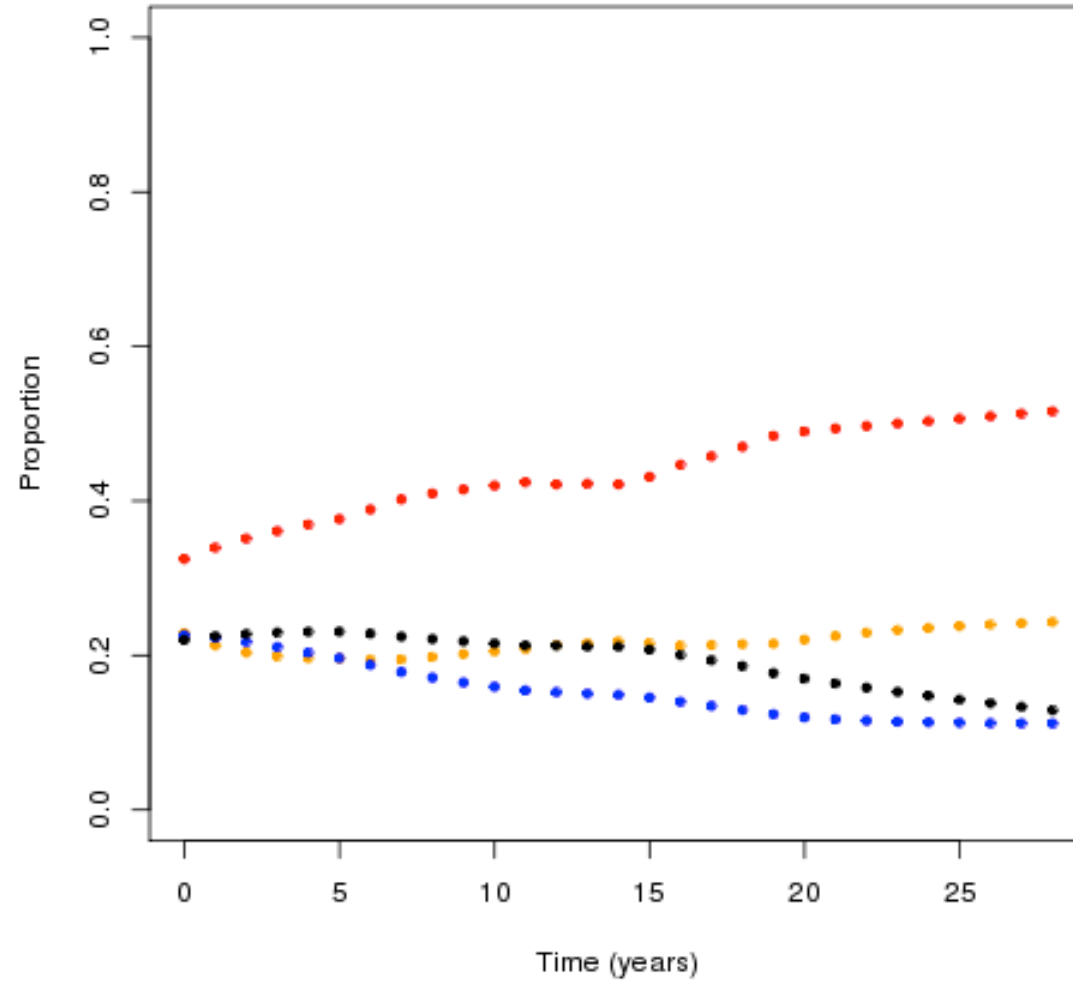


Indiana

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2258	0.1658	0.1376	0.4532	0.7503	0.8144	0.9259
<i>Standard Errors</i>	0.1422	0.132	0.1516	0.0264	0.1999	0.1756	0.1252



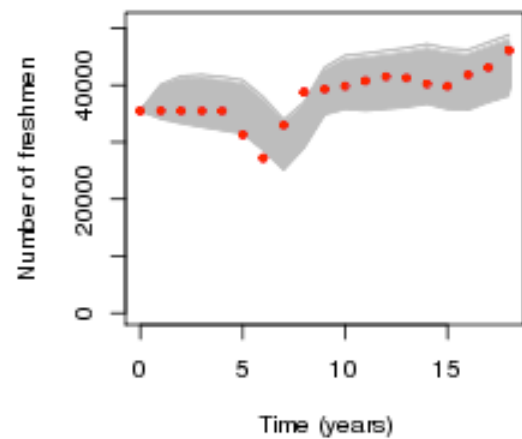
Iowa Ten Year Forecast



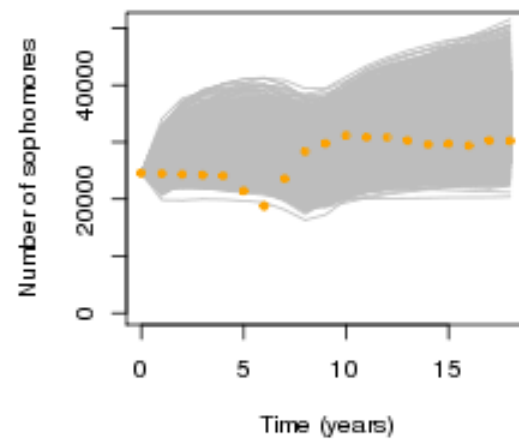
Iowa

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2617	0.1479	0.061	0.3282	0.6279	0.8737	0.9548
<i>Standard Errors</i>	0.1416	0.0951	0.0513	0.0087	0.1966	0.0845	0.0502

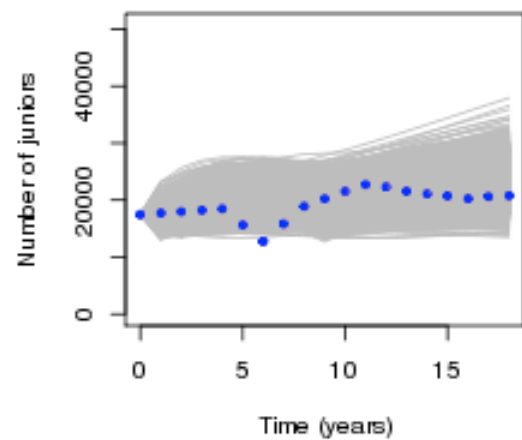
Kansas



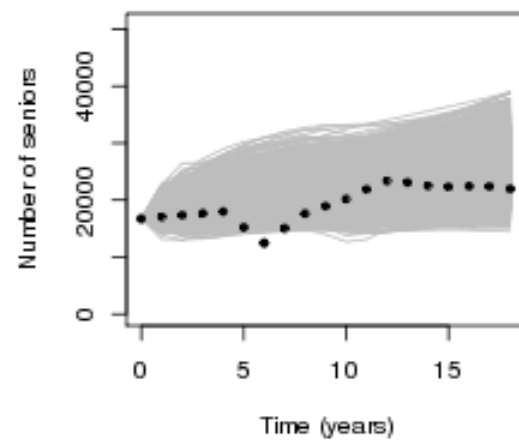
Kansas



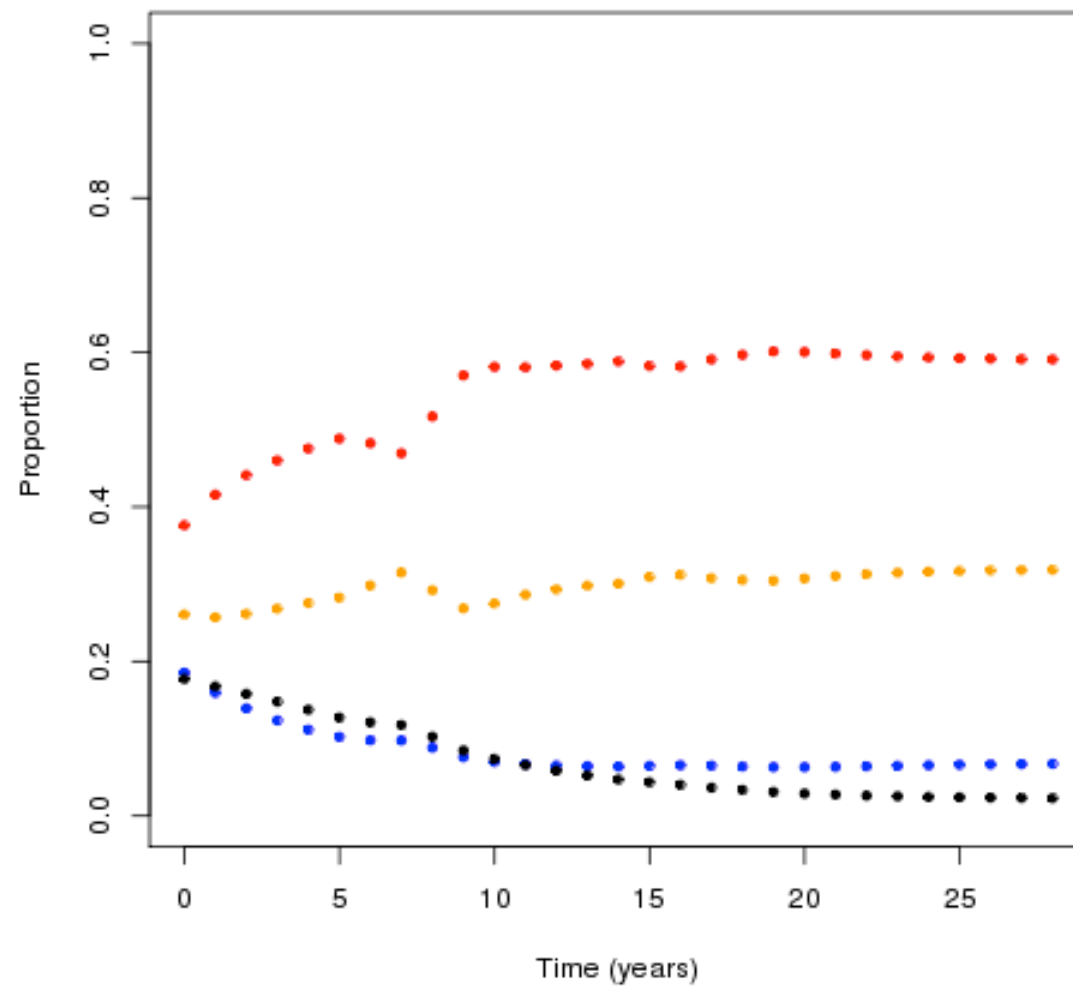
Kansas



Kansas



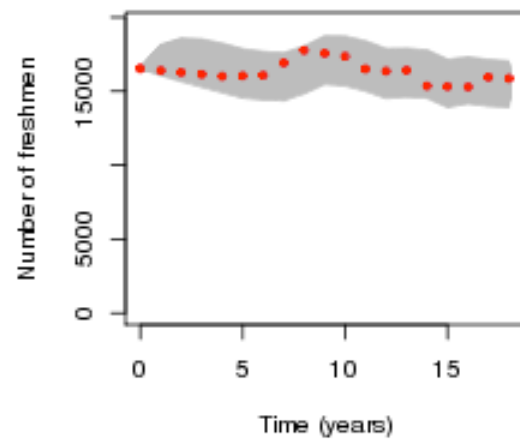
Kansas Ten Year Forecast



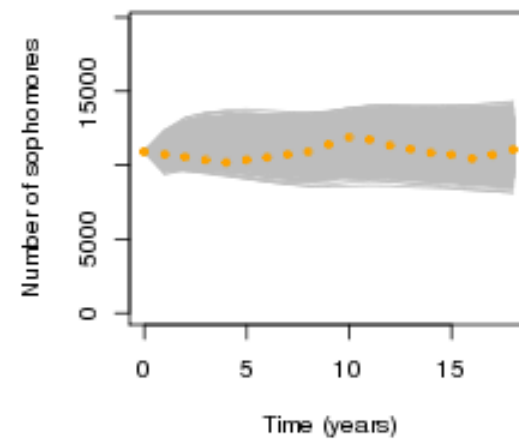
Kansas

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2436	0.1927	0.1919	0.3419	0.7037	0.7352	0.8436
<i>Standard Errors</i>	0.1903	0.1806	0.2195	0.0221	0.2491	0.2562	0.2064

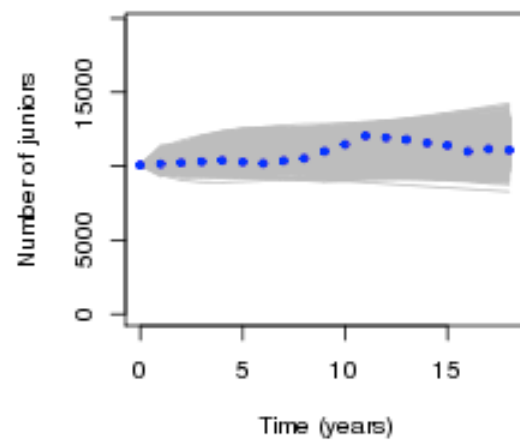
Kentucky



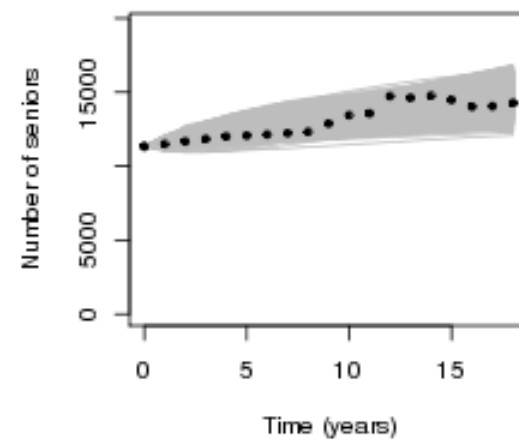
Kentucky



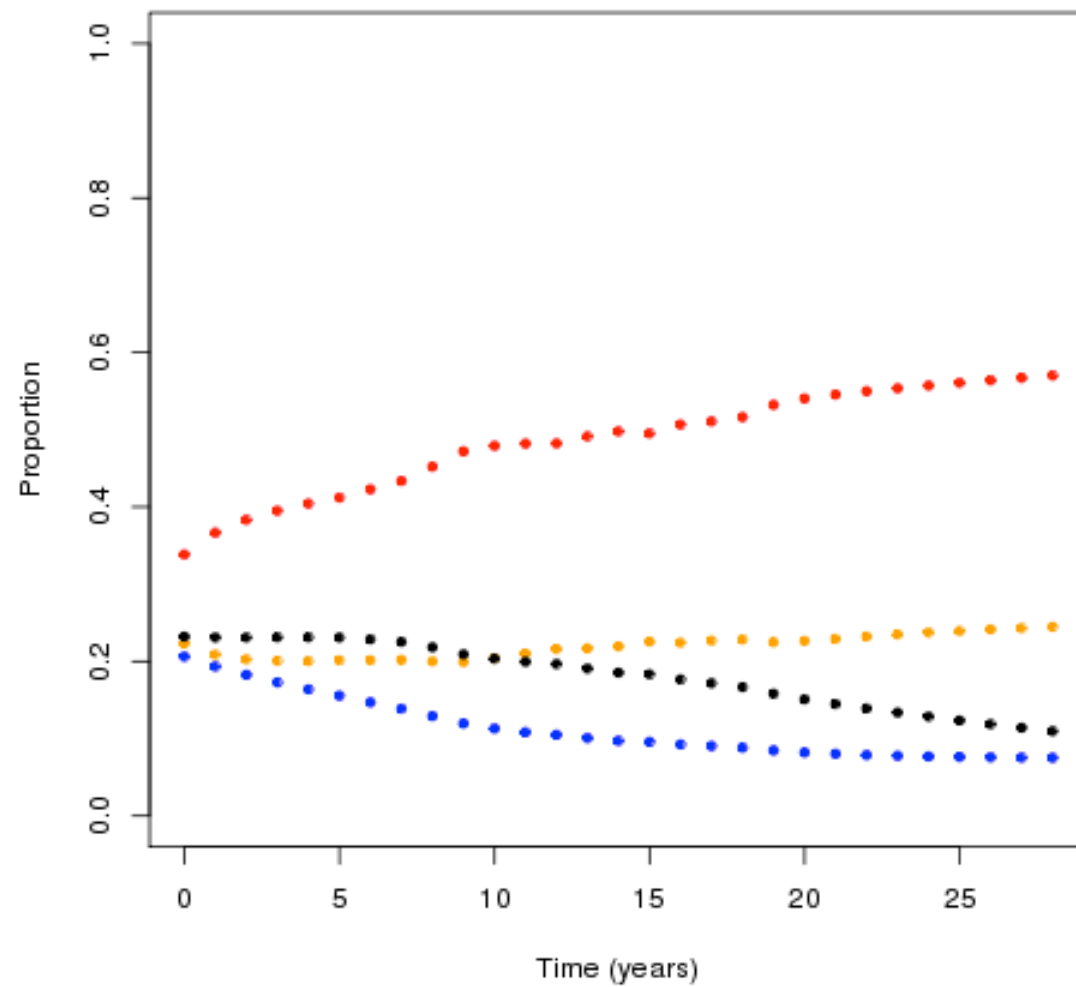
Kentucky



Kentucky



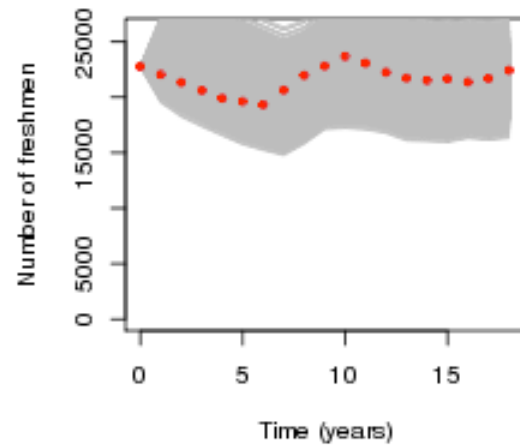
Kentucky Ten Year Forecast



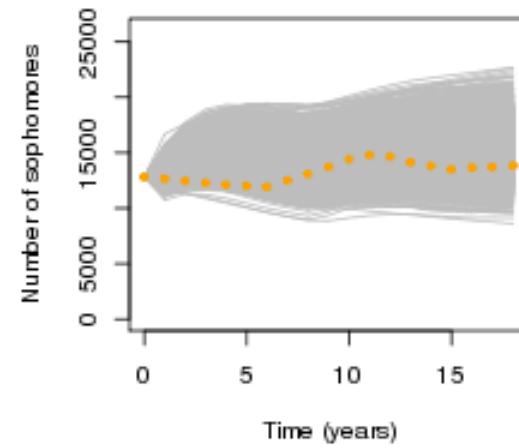
Kentucky

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1988	0.1426	0.0779	0.3786	0.713	0.8596	0.9489
<i>Standard Errors</i>	0.1589	0.1402	0.0961	0.0167	0.2349	0.1467	0.0828

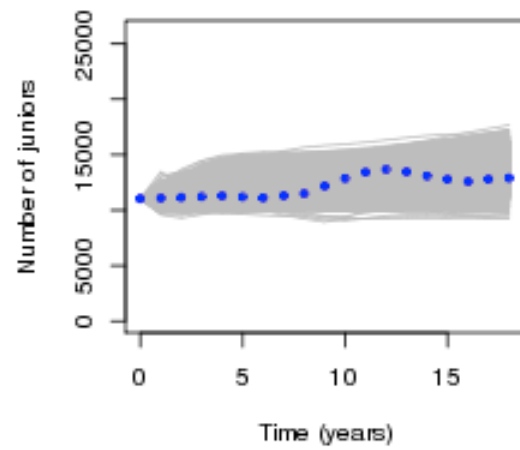
Louisiana



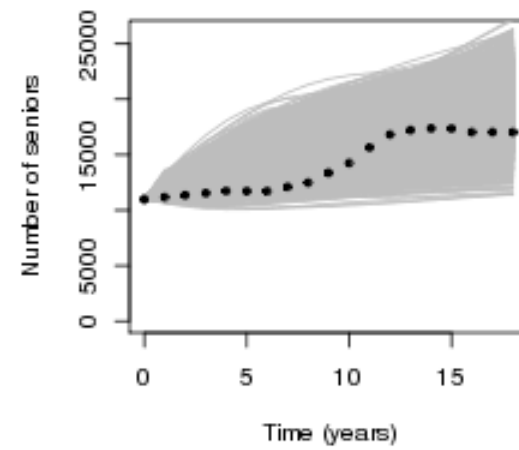
Louisiana



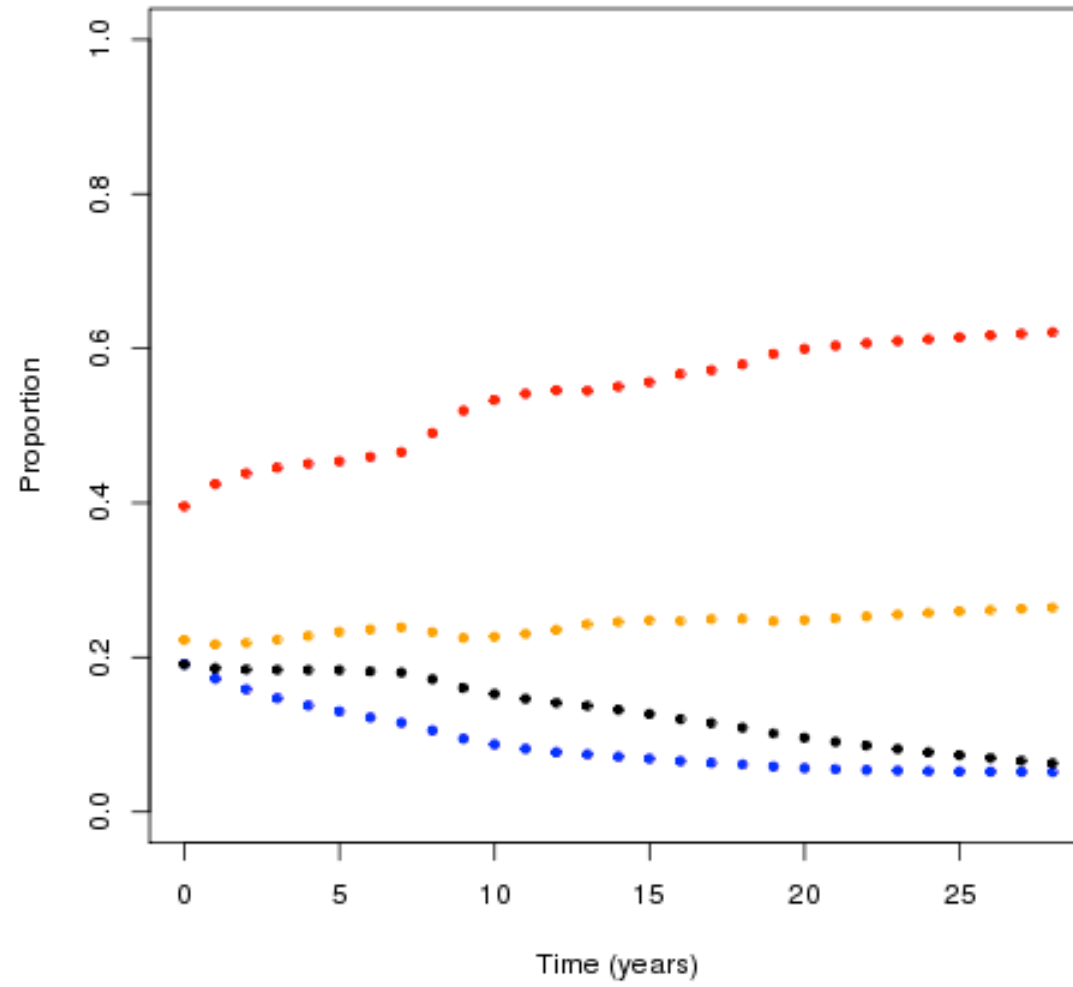
Louisiana



Louisiana



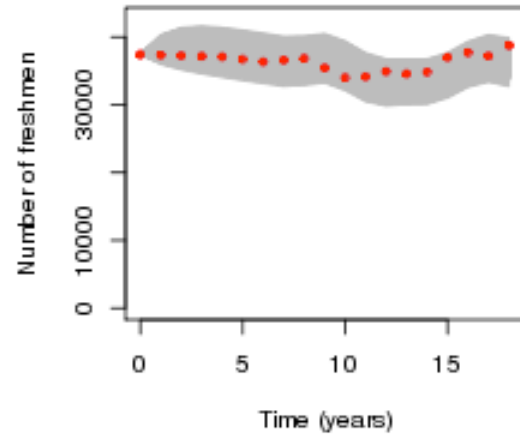
Louisiana Ten Year Forecast



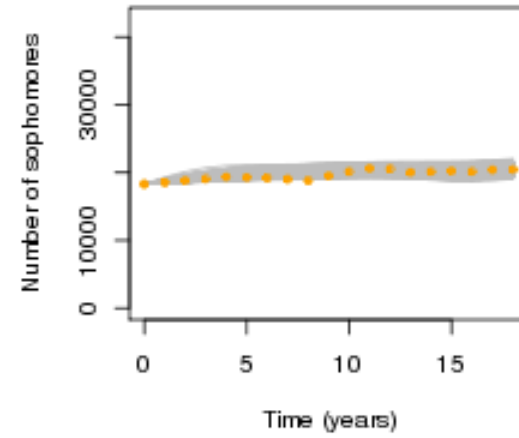
Louisiana

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1433	0.1424	0.1228	0.3825	0.7935	0.8444	0.9327
<i>Standard Errors</i>	0.1102	0.1166	0.1264	0.0467	0.1824	0.1373	0.1038

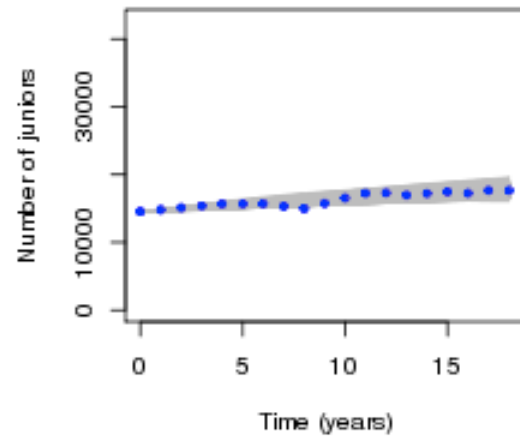
Maine



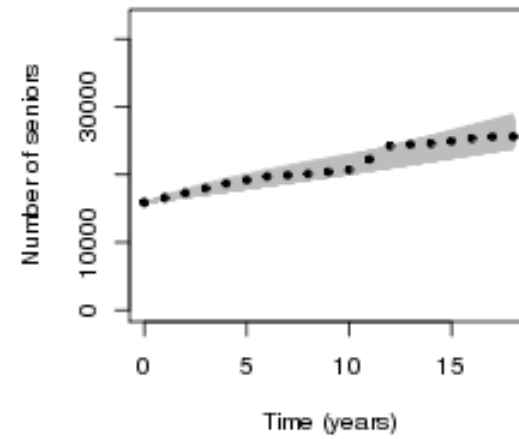
Maine



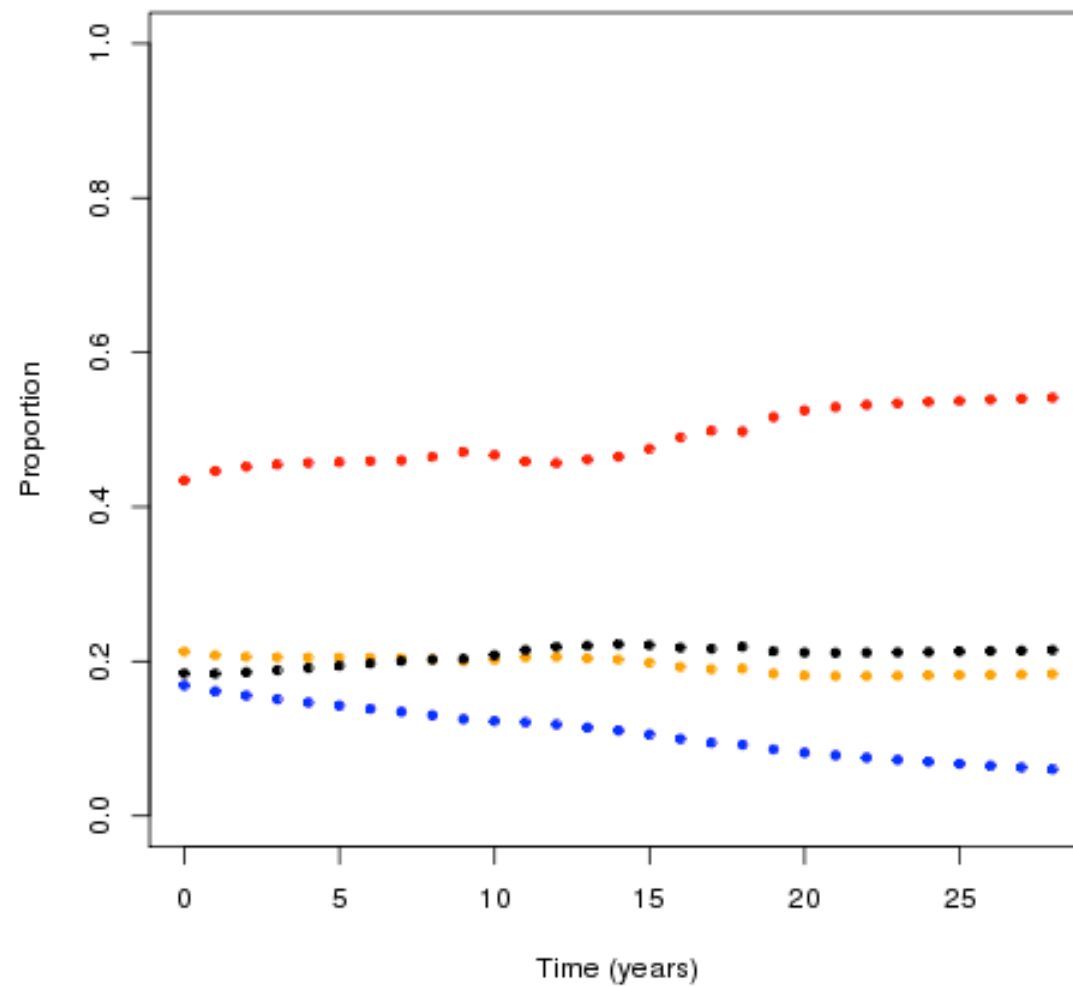
Maine



Maine



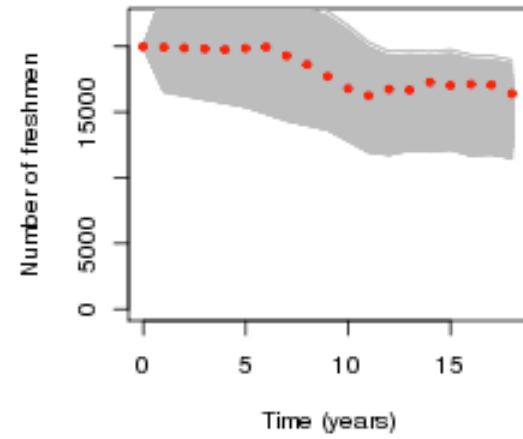
Maine Ten Year Forecast



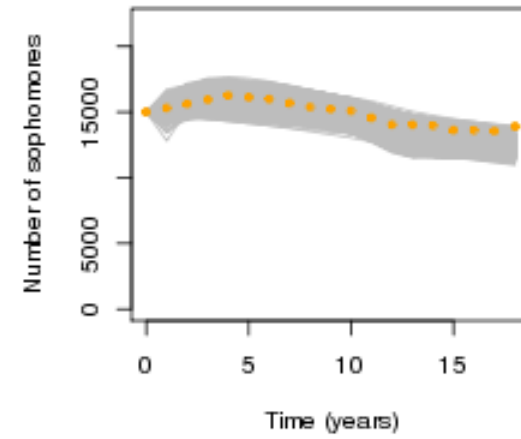
Maine

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.0384	0.0464	0.0361	0.4248	0.9348	0.9536	0.9997
<i>Standard Errors</i>	0.017	0.0133	0.0072	0.0153	0.0316	0.0165	0.0054

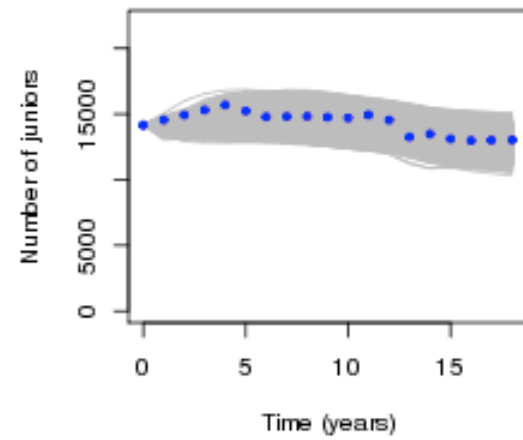
Maryland



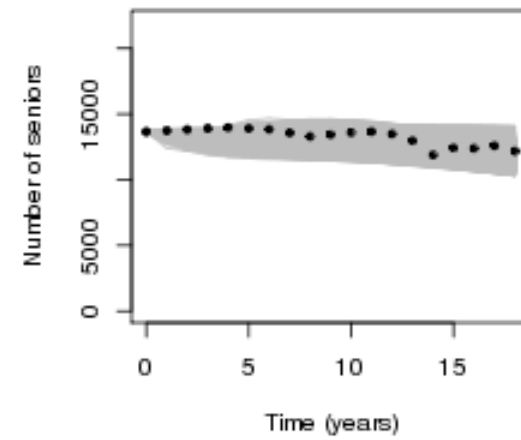
Maryland



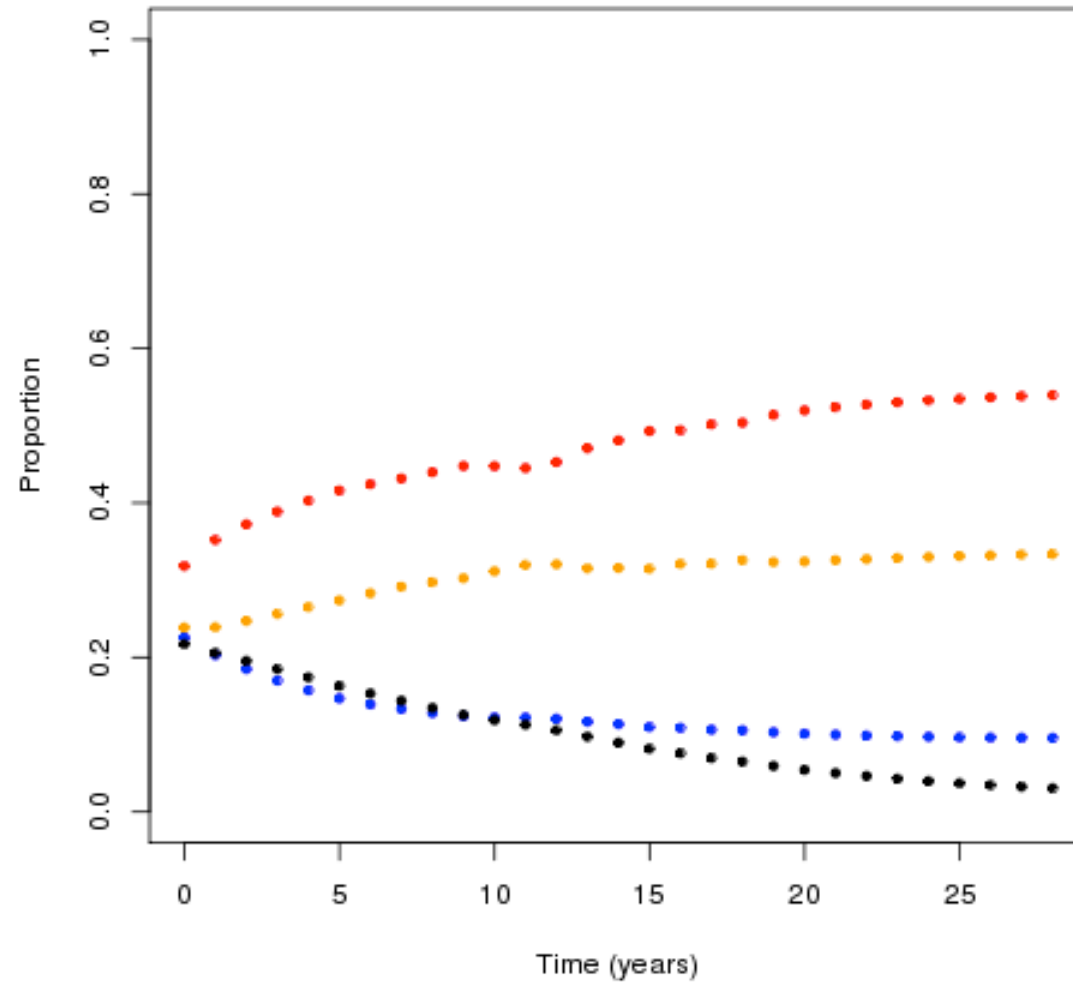
Maryland



Maryland



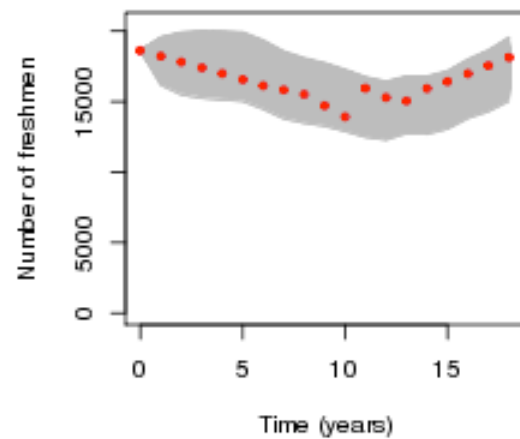
Maryland Ten Year Forecast



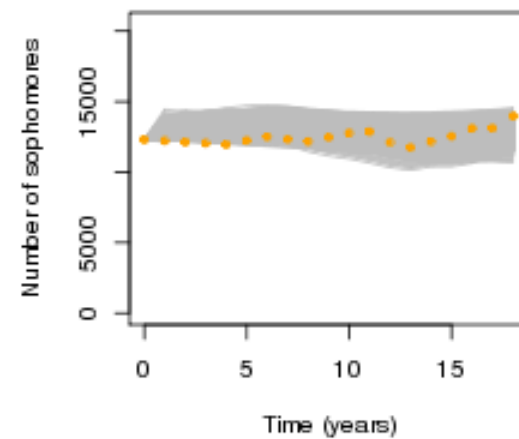
Maryland

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2393	0.1977	0.1087	0.2187	0.6976	0.7876	0.8714
<i>Standard Errors</i>	0.0986	0.111	0.0904	0.0594	0.1304	0.1177	0.0996

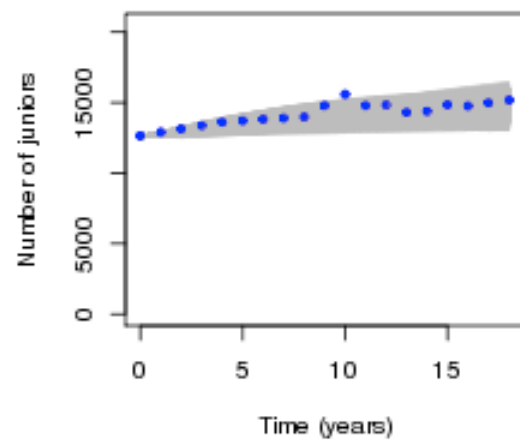
Massachusetts



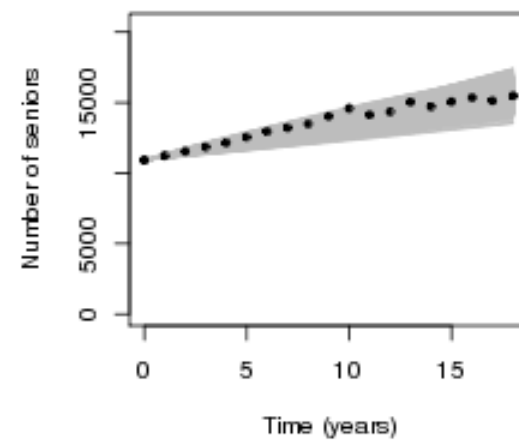
Massachusetts



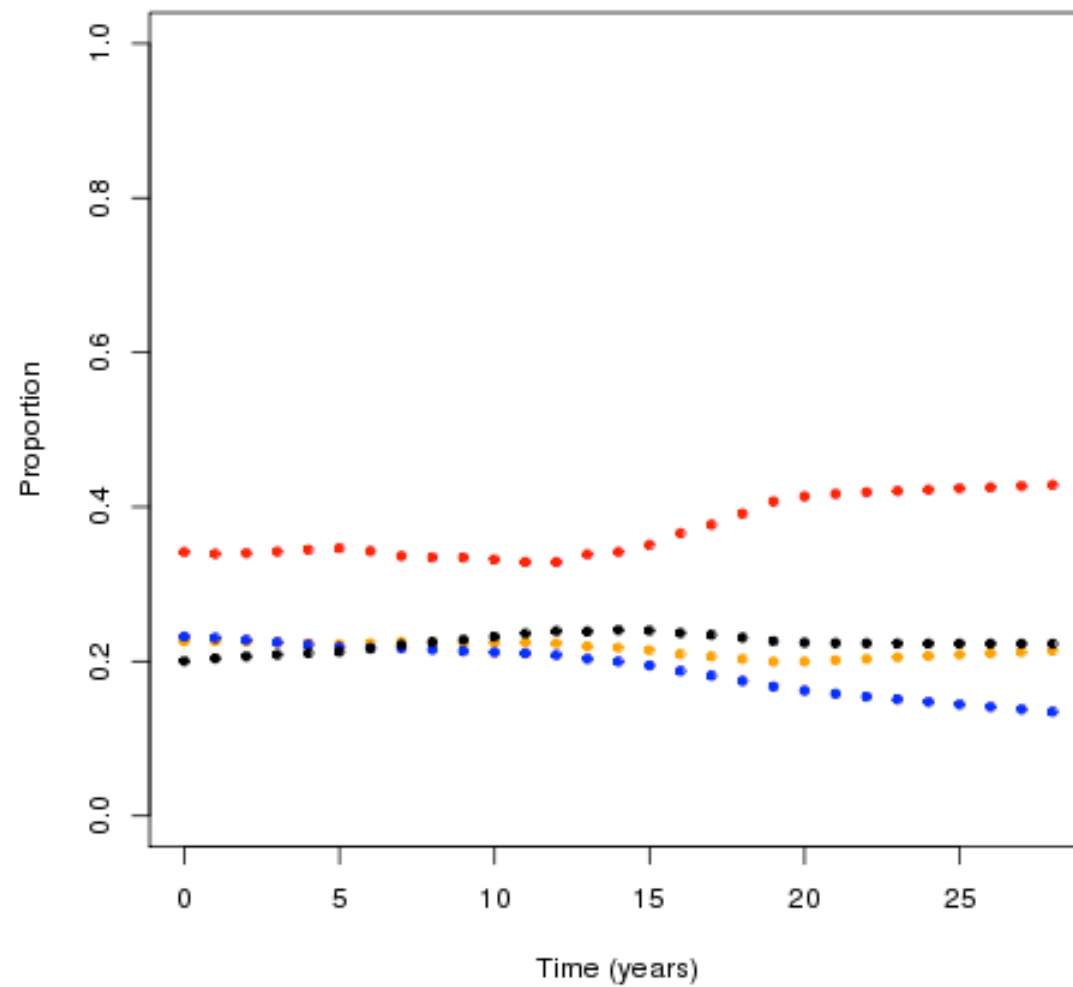
Massachusetts



Massachusetts



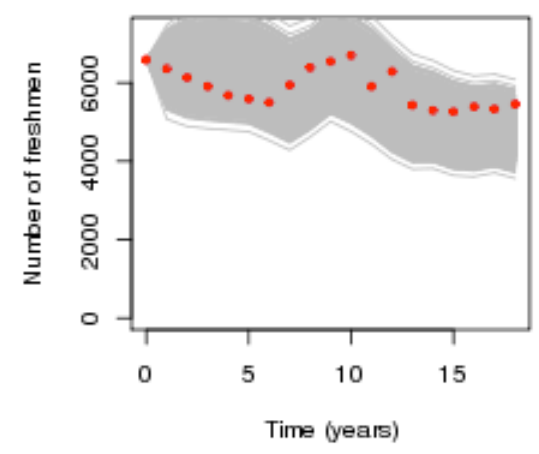
Massachusetts Ten Year Forecast



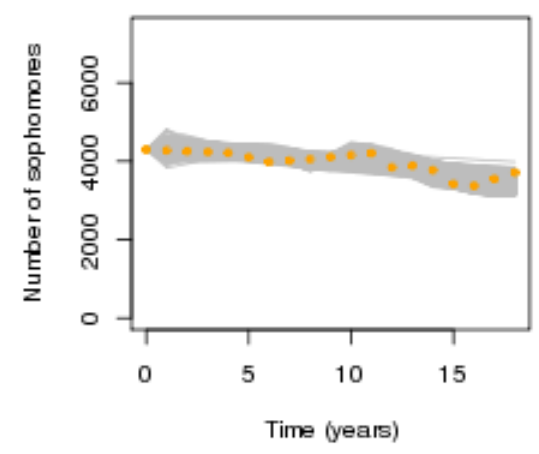
Massachusetts

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.0715	0.0424	0.0223	0.3609	0.9119	0.9691	0.9957
<i>Standard Errors</i>	0.0636	0.0203	0.0125	0.0257	0.0834	0.0197	0.0133

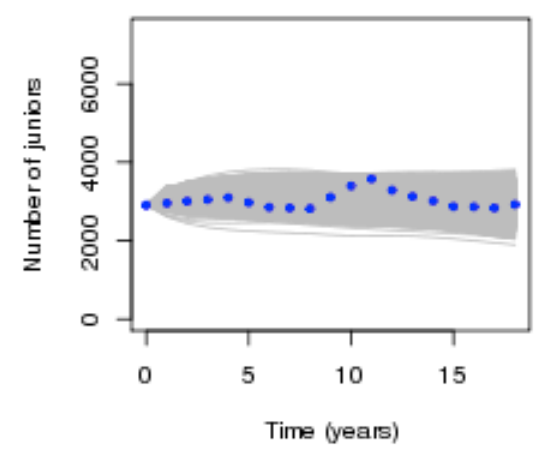
Michigan



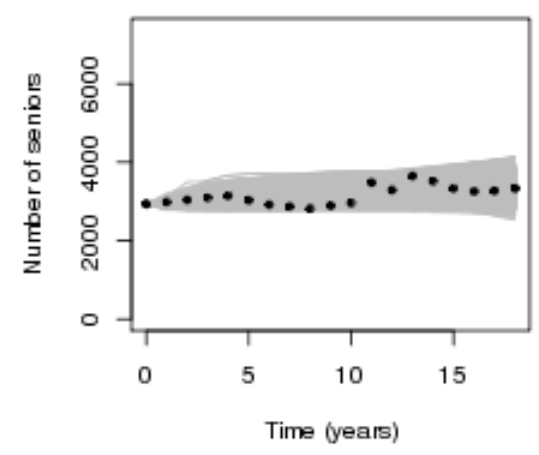
Michigan



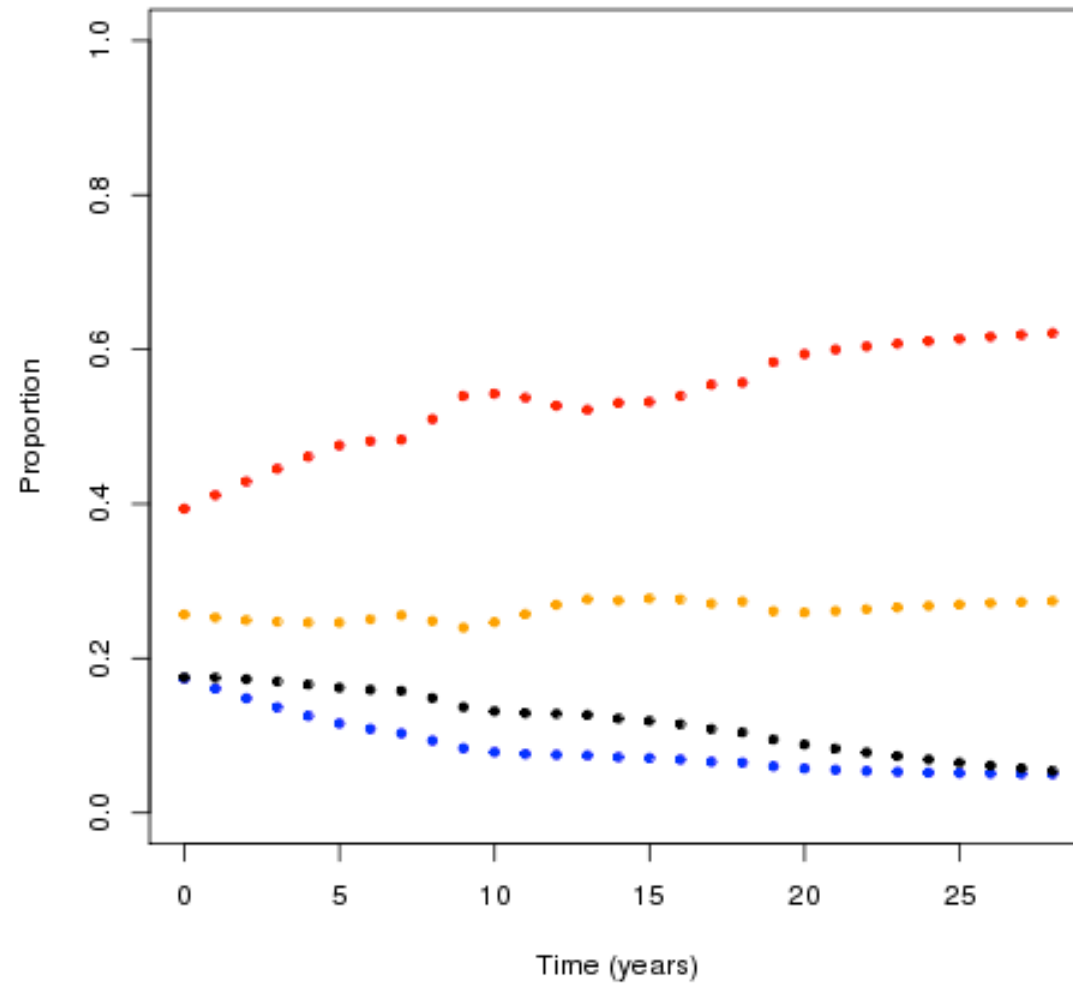
Michigan



Michigan



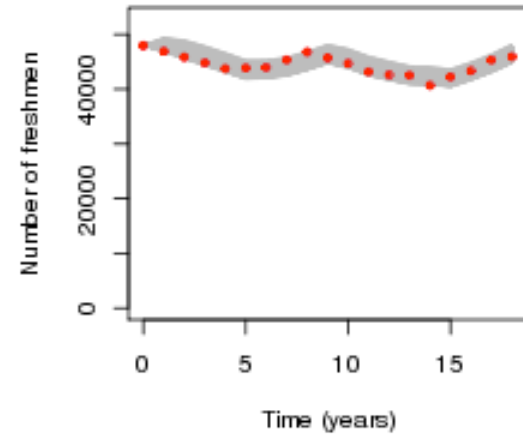
Michigan Ten Year Forecast



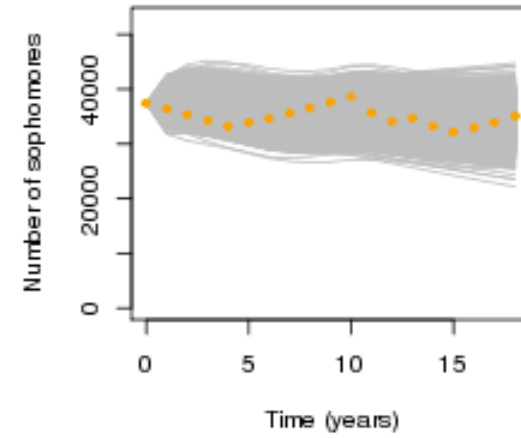
Michigan

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.146	0.133	0.085	0.3139	0.7739	0.8273	0.9254
<i>Standard Errors</i>	0.0895	0.1242	0.1028	0.0433	0.1352	0.1655	0.1004

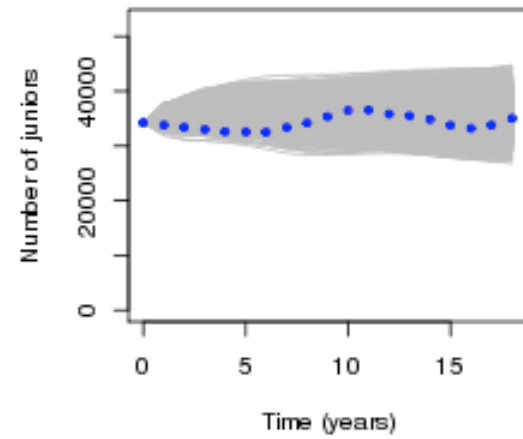
Minnesota



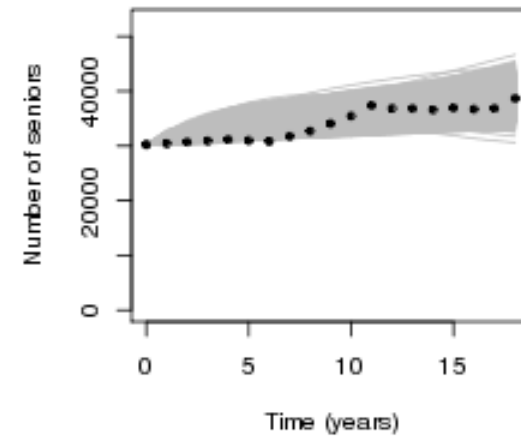
Minnesota



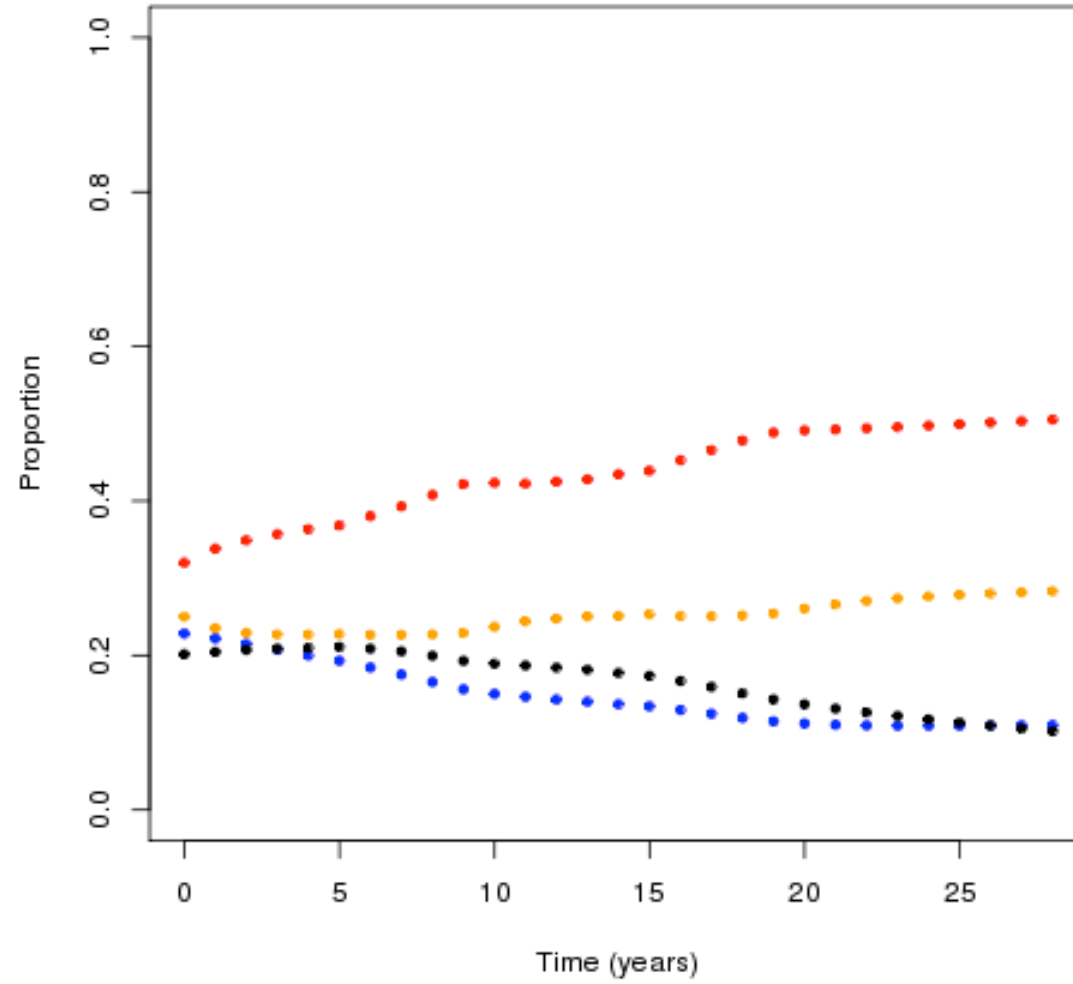
Minnesota



Minnesota



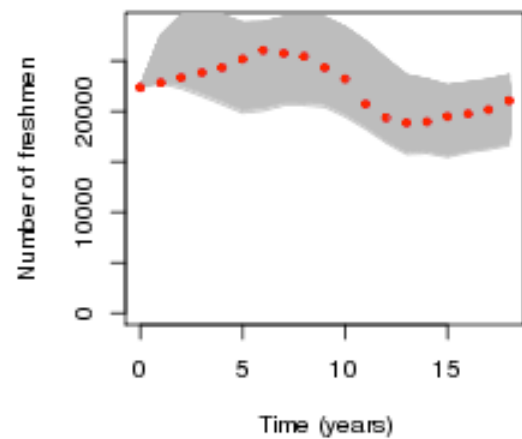
Minnesota Ten Year Forecast



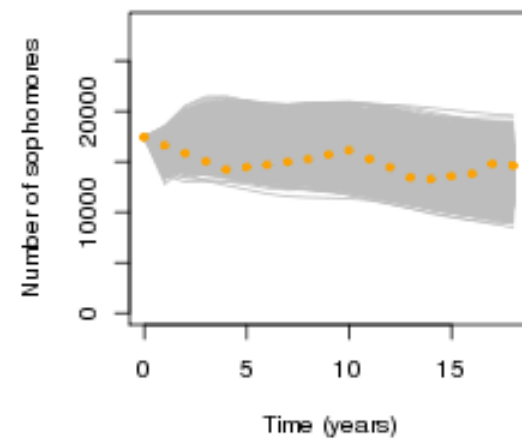
Minnesota

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2997	0.1362	0.0586	0.2889	0.62	0.8657	0.9538
<i>Standard Errors</i>	0.2183	0.1334	0.0659	0.0073	0.2772	0.1374	0.069

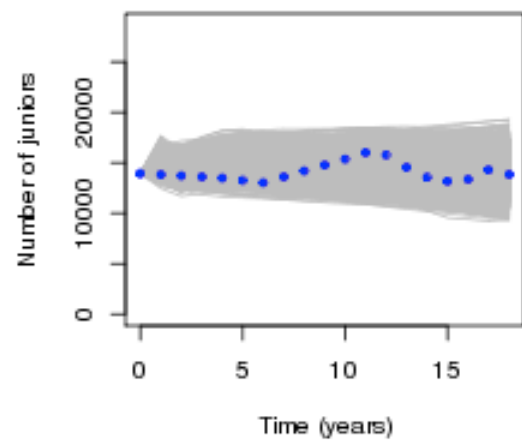
Mississippi



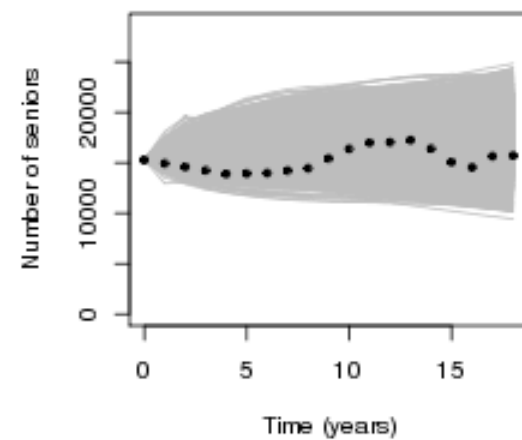
Mississippi



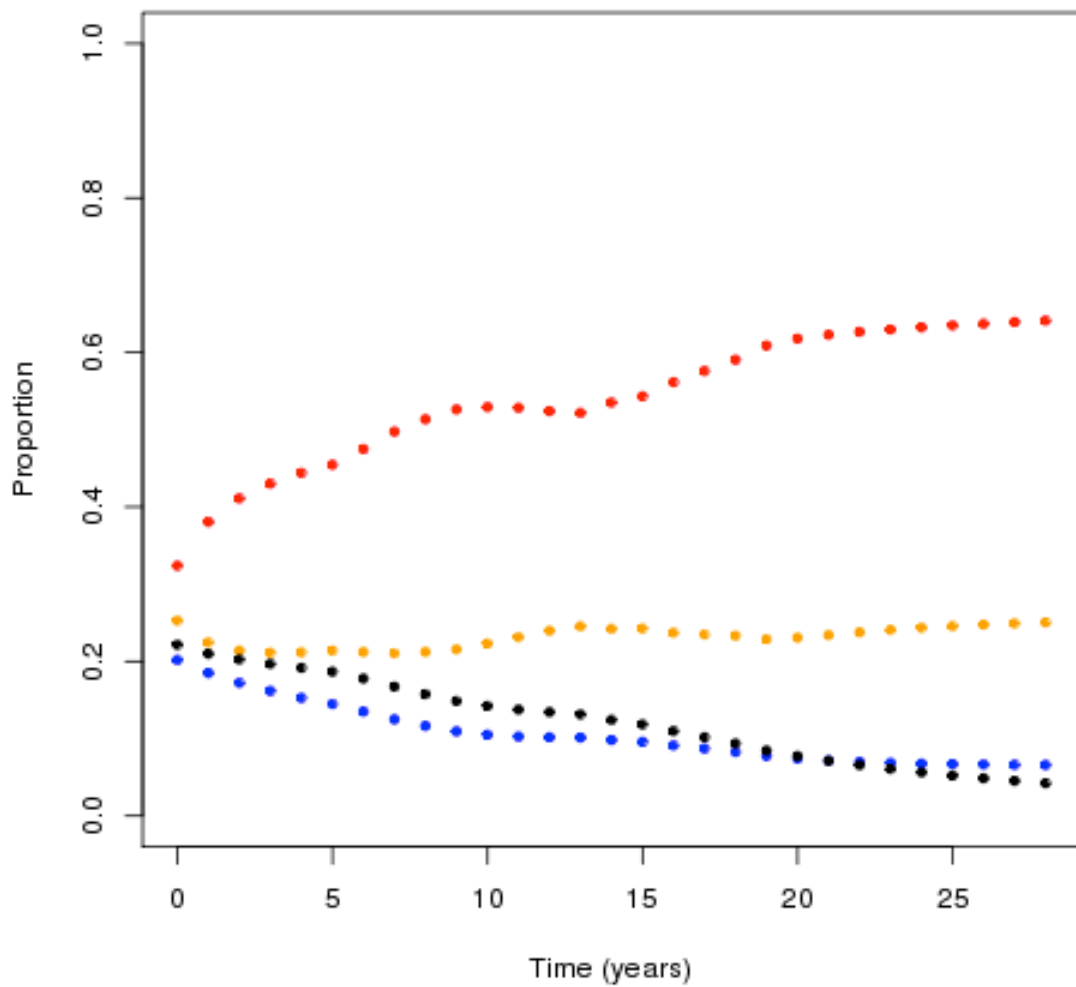
Mississippi



Mississippi



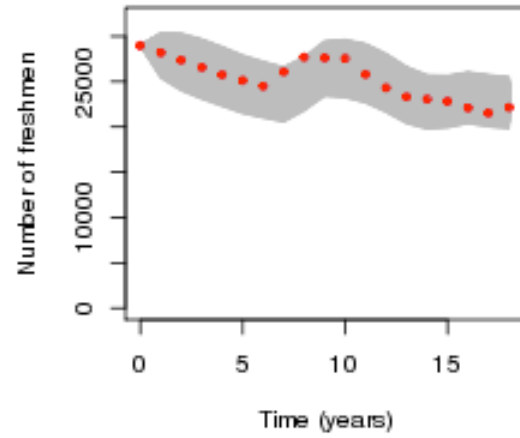
Mississippi Ten Year Forecast



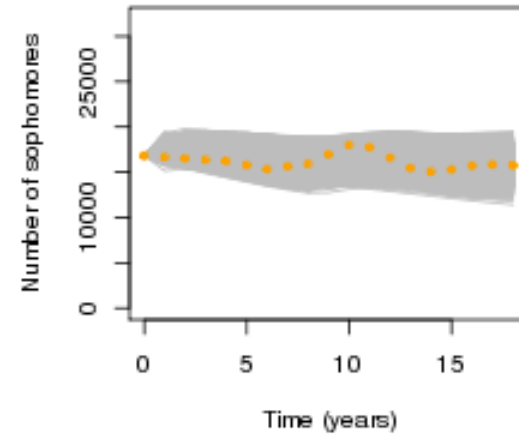
Mississippi

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1885	0.1514	0.125	0.4179	0.7205	0.8341	0.8998
<i>Standard Errors</i>	0.1735	0.167	0.1655	0.0306	0.2448	0.1888	0.1438

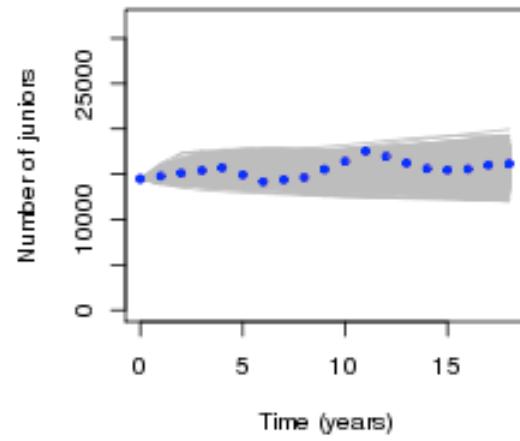
Missouri



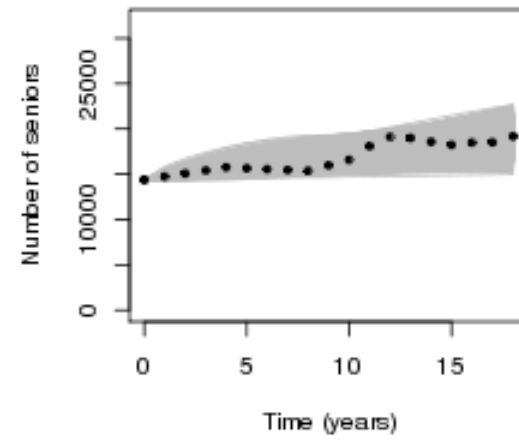
Missouri



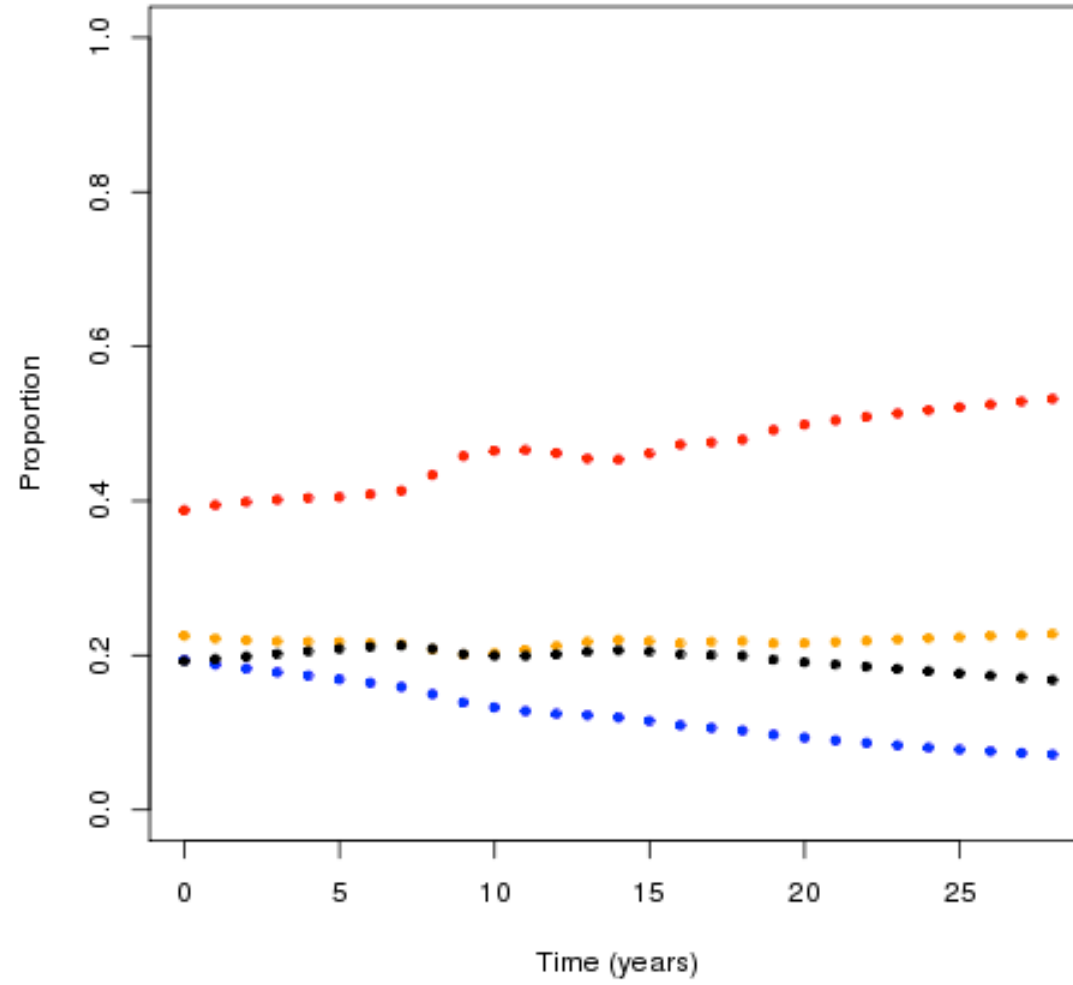
Missouri



Missouri



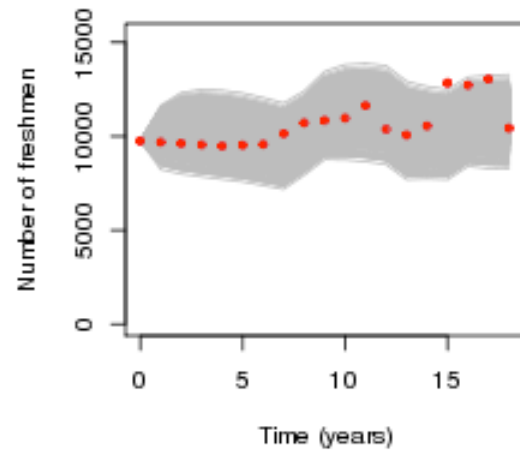
Missouri Ten Year Forecast



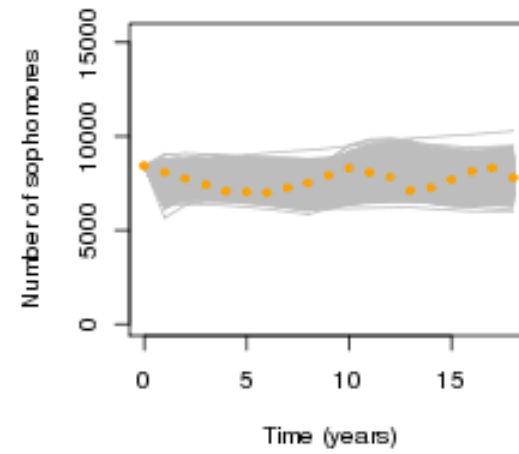
Montana

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1239	0.0791	0.0451	0.3281	0.8057	0.9185	0.9748
<i>Standard Errors</i>	0.1269	0.0875	0.0575	0.0238	0.2035	0.0966	0.053

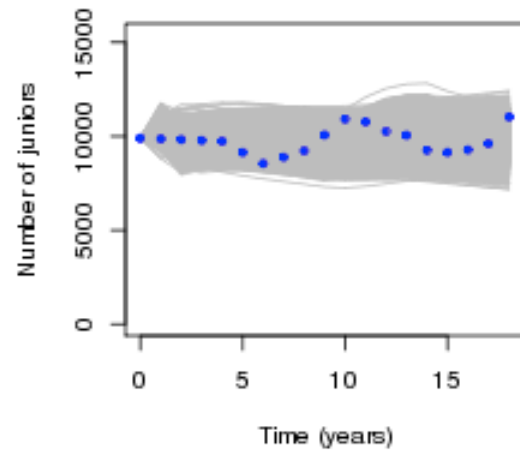
Montana



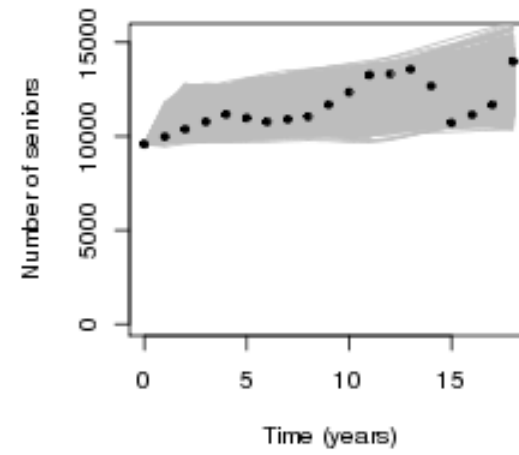
Montana



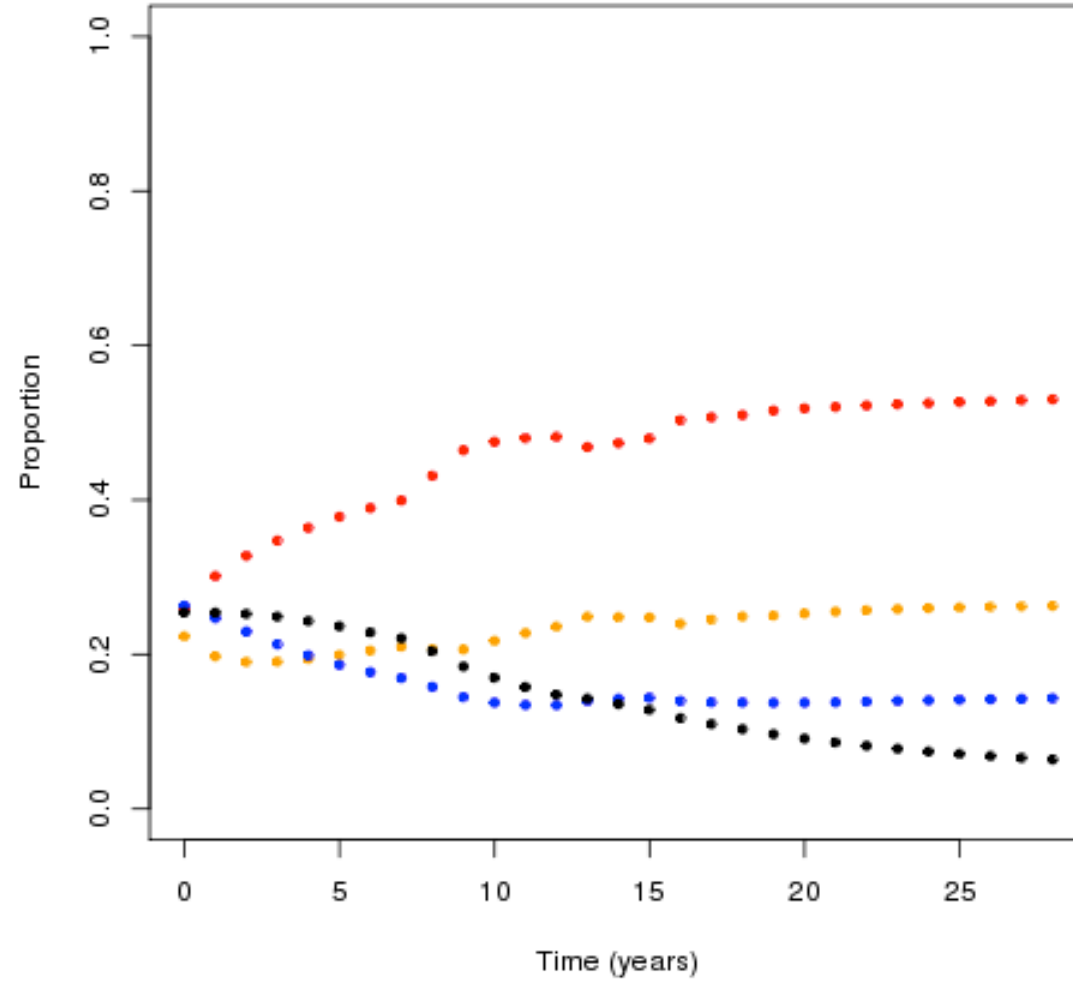
Montana



Montana



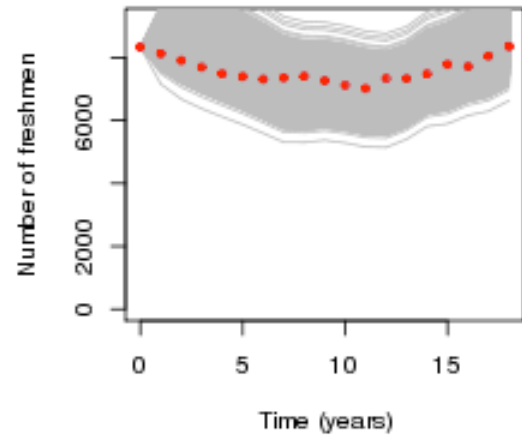
Montana Ten Year Forecast



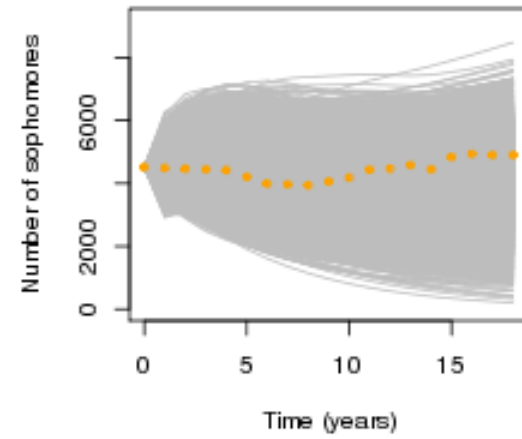
Nebraska

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.3079	0.3094	0.1441	0.3151	0.5746	0.7592	0.8905
<i>Standard Errors</i>	0.1793	0.2328	0.1434	0.0433	0.2385	0.1831	0.1264

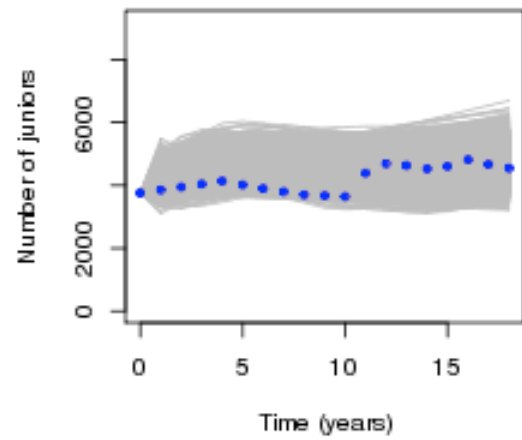
Nebraska



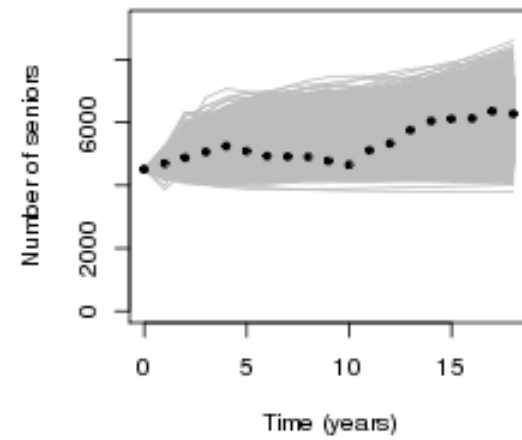
Nebraska



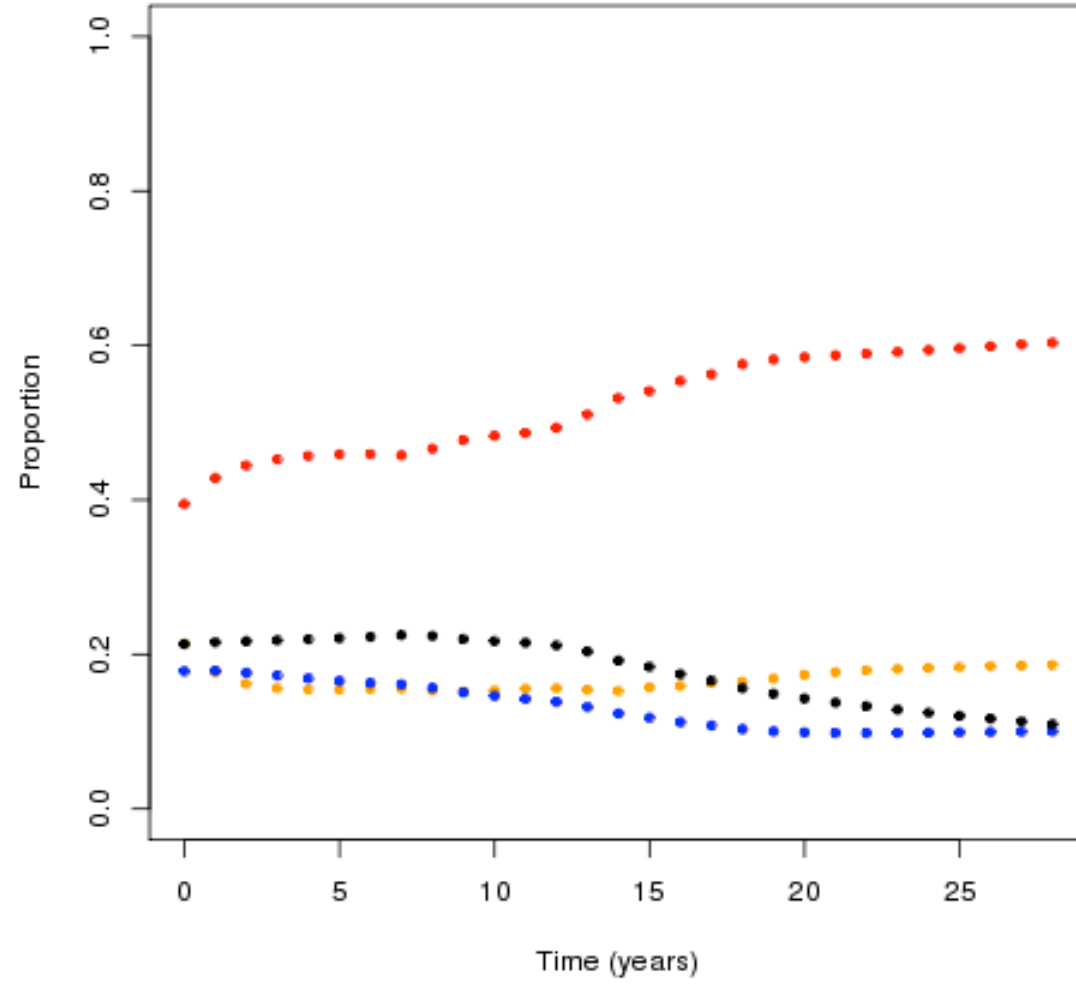
Nebraska



Nebraska



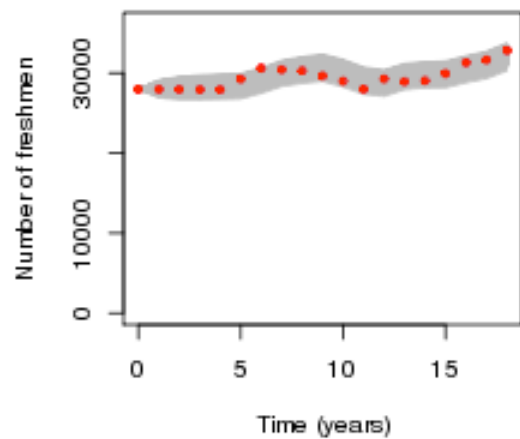
Nebraska Ten Year Forecast



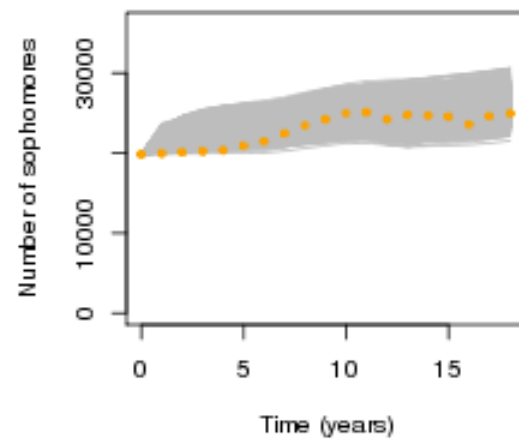
Nevada

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2649	0.1332	0.0707	0.4334	0.5139	0.8807	0.9579
<i>Standard Errors</i>	0.2049	0.1639	0.1182	0.0337	0.3631	0.1713	0.0951

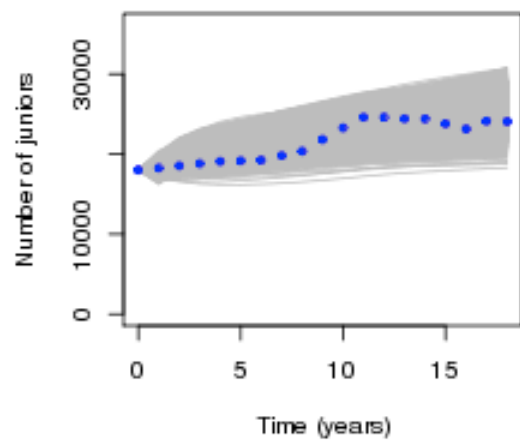
Nevada



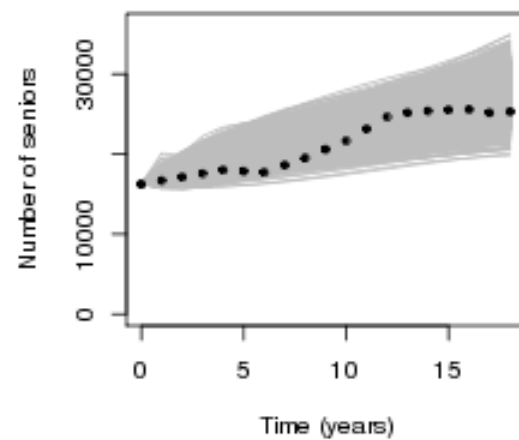
Nevada



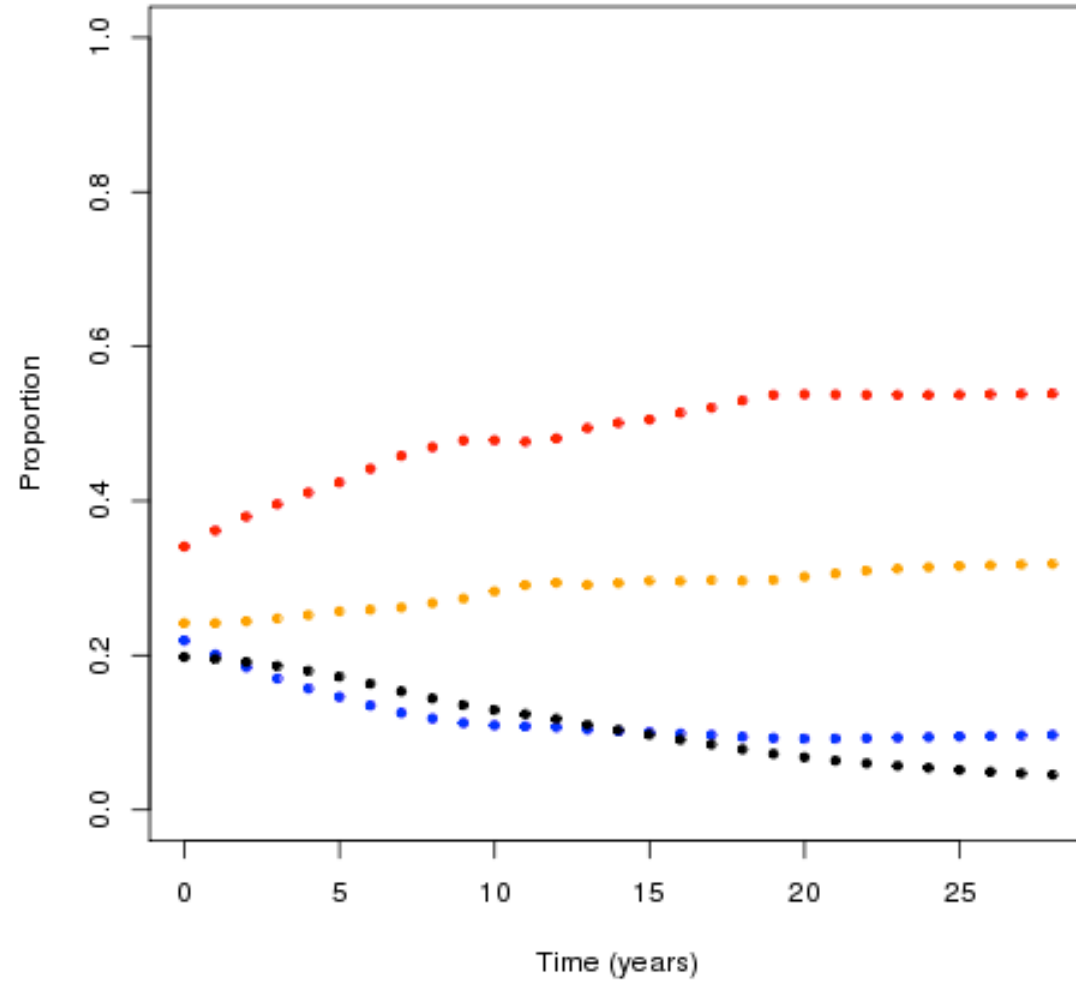
Nevada



Nevada



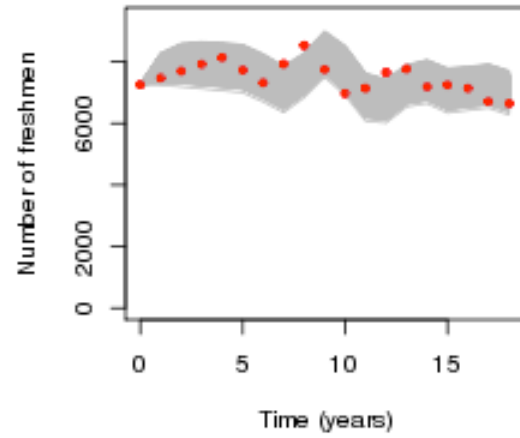
Nevada Ten Year Forecast



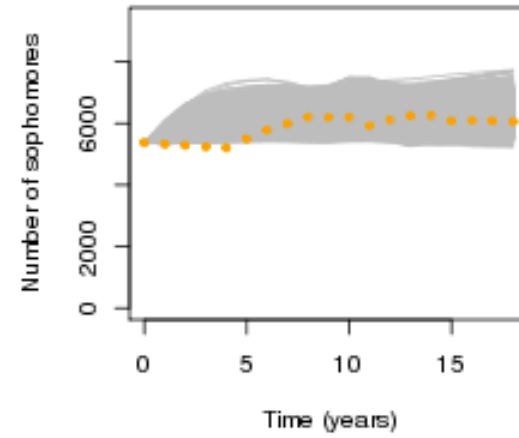
New Hampshire

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2589	0.1983	0.1151	0.2971	0.693	0.8046	0.9131
<i>Standard Errors</i>	0.1642	0.1655	0.1228	0.01	0.2058	0.1797	0.125

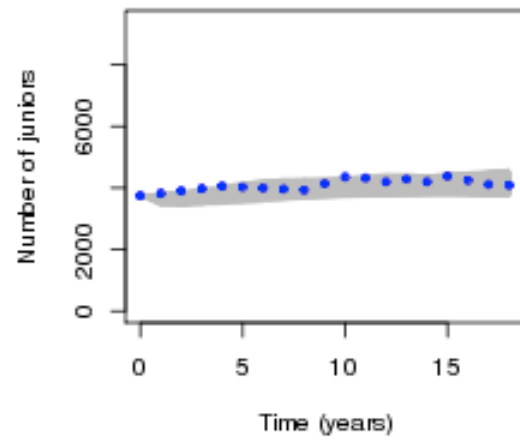
NewHampshire



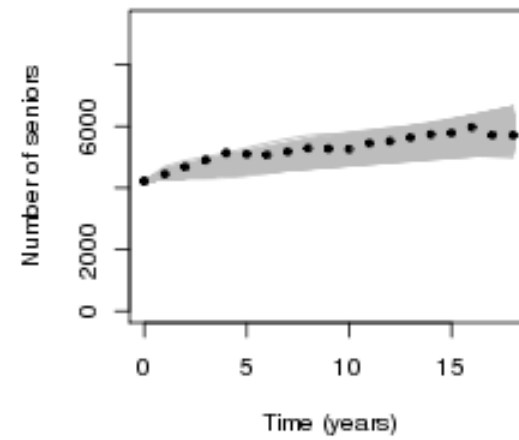
NewHampshire



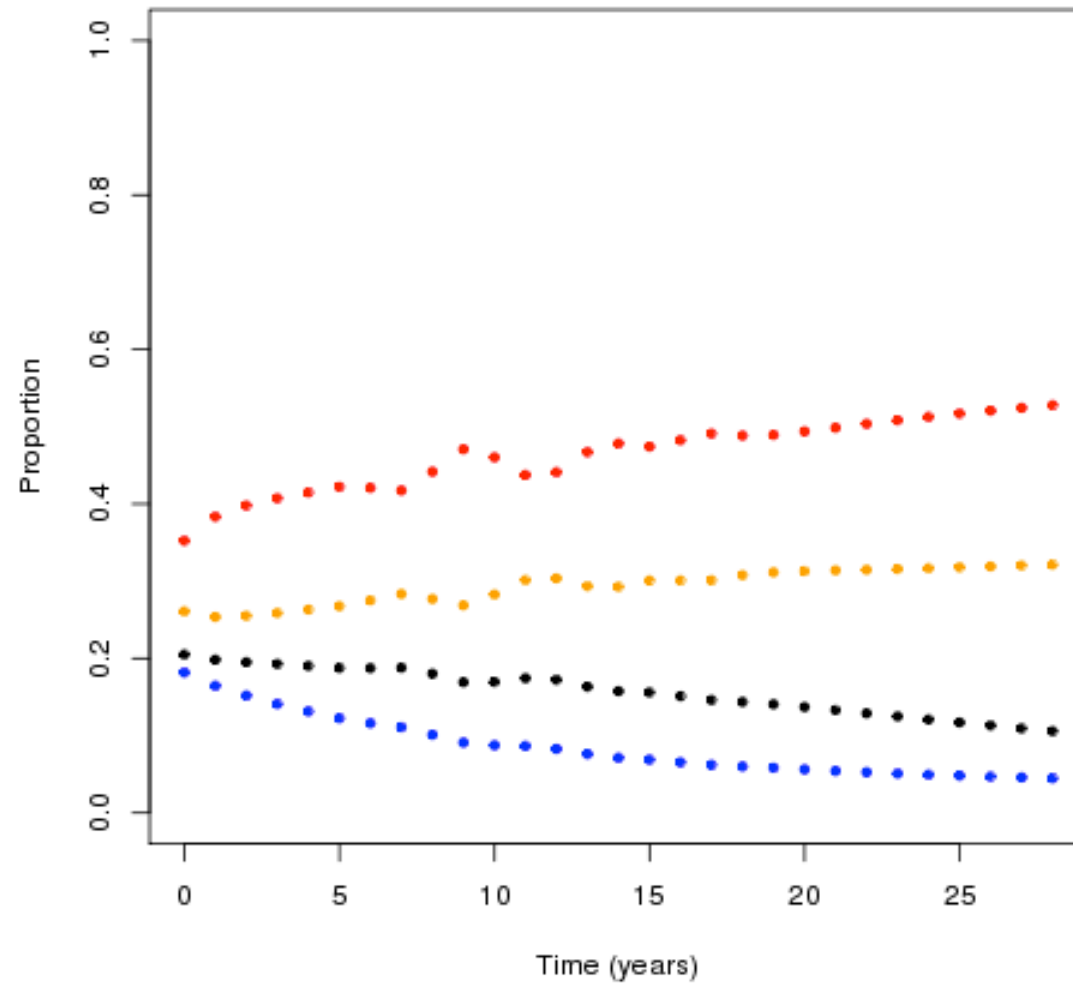
NewHampshire



NewHampshire



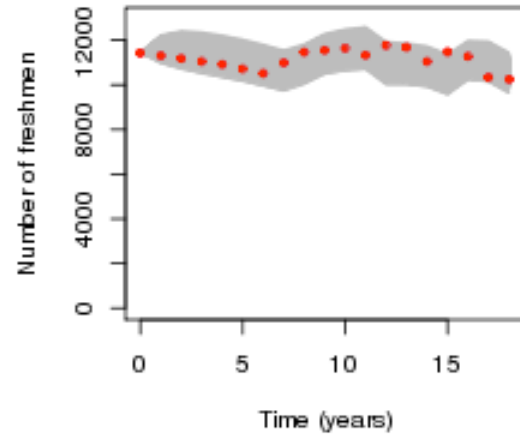
New Hampshire Ten Year Forecast



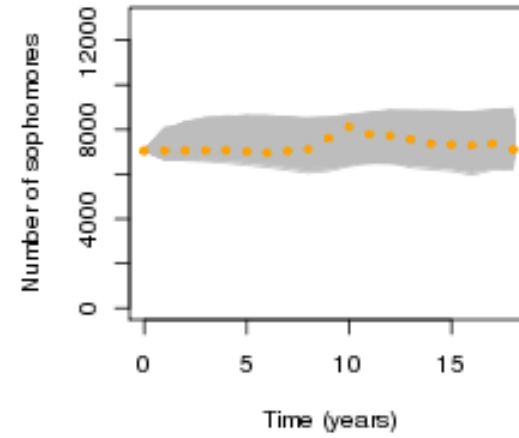
New Jersey

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1375	0.0777	0.0787	0.2936	0.8382	0.885	0.9561
<i>Standard Errors</i>	0.1055	0.0536	0.0742	0.0184	0.1309	0.0846	0.0582

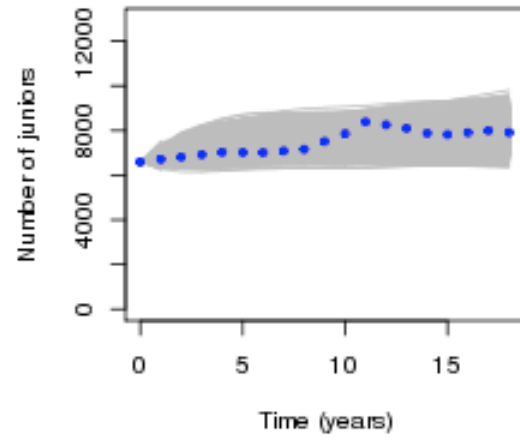
NewJersey



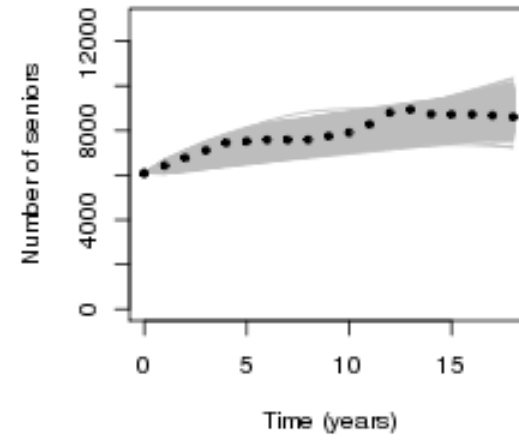
NewJersey



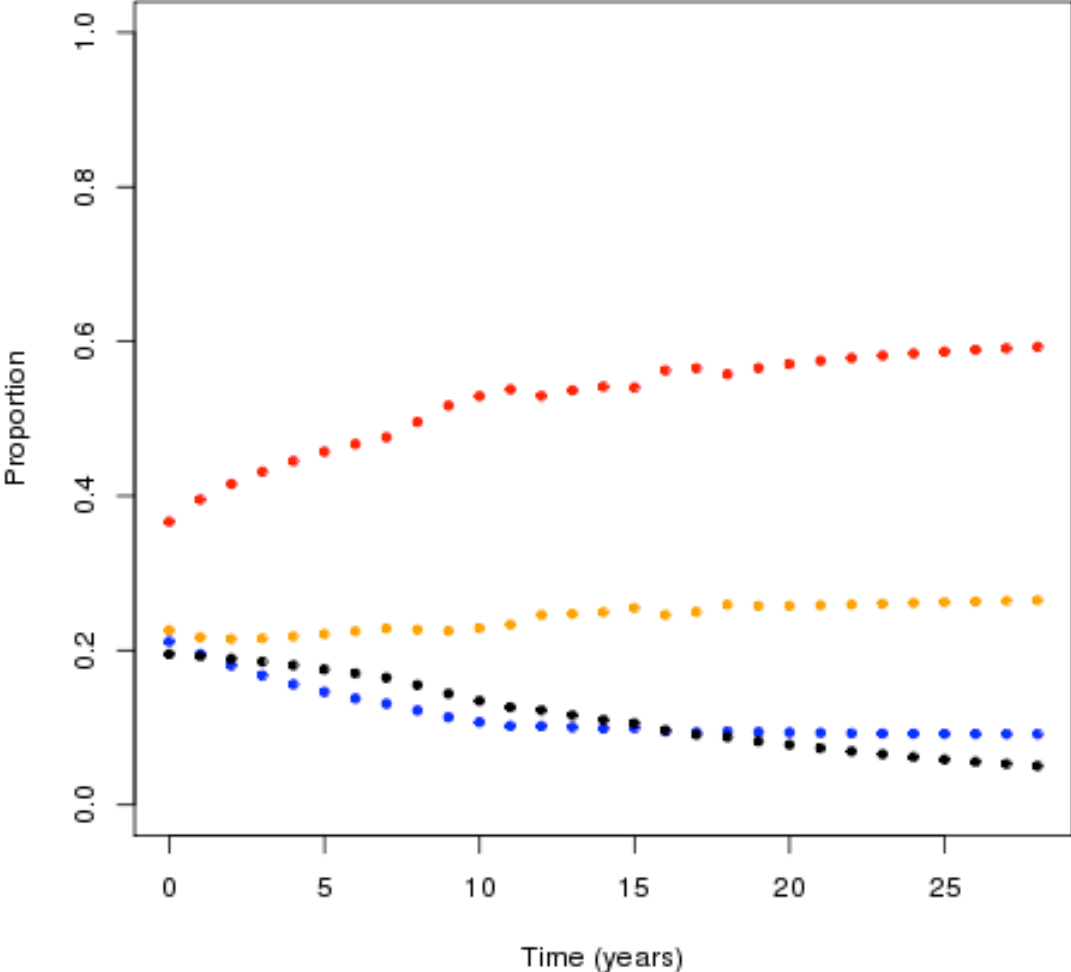
NewJersey



NewJersey



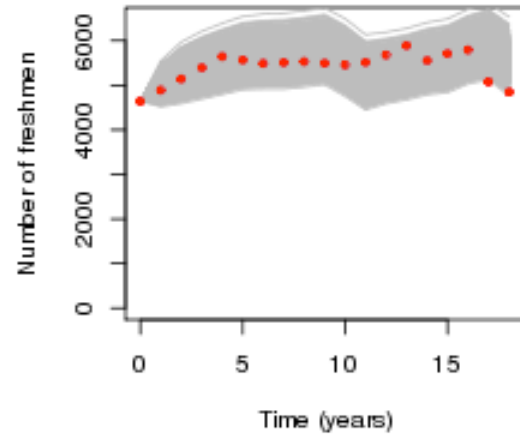
New Jersey Ten Year Forecast



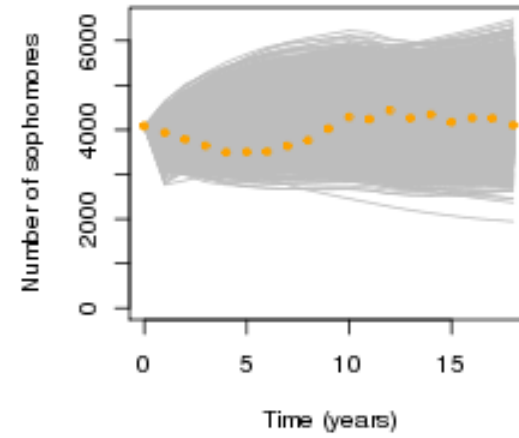
New Mexico

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2209	0.2064	0.1094	0.3426	0.6748	0.803	0.9115
<i>Standard Errors</i>	0.1336	0.1451	0.0914	0.0148	0.2039	0.1475	0.0927

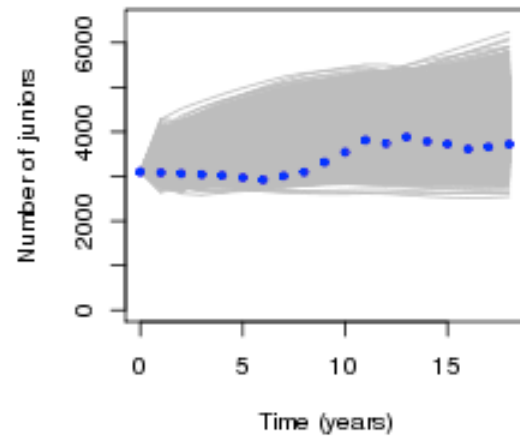
NewMexico



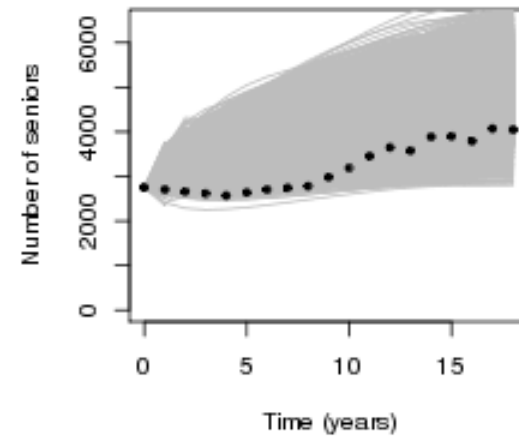
NewMexico



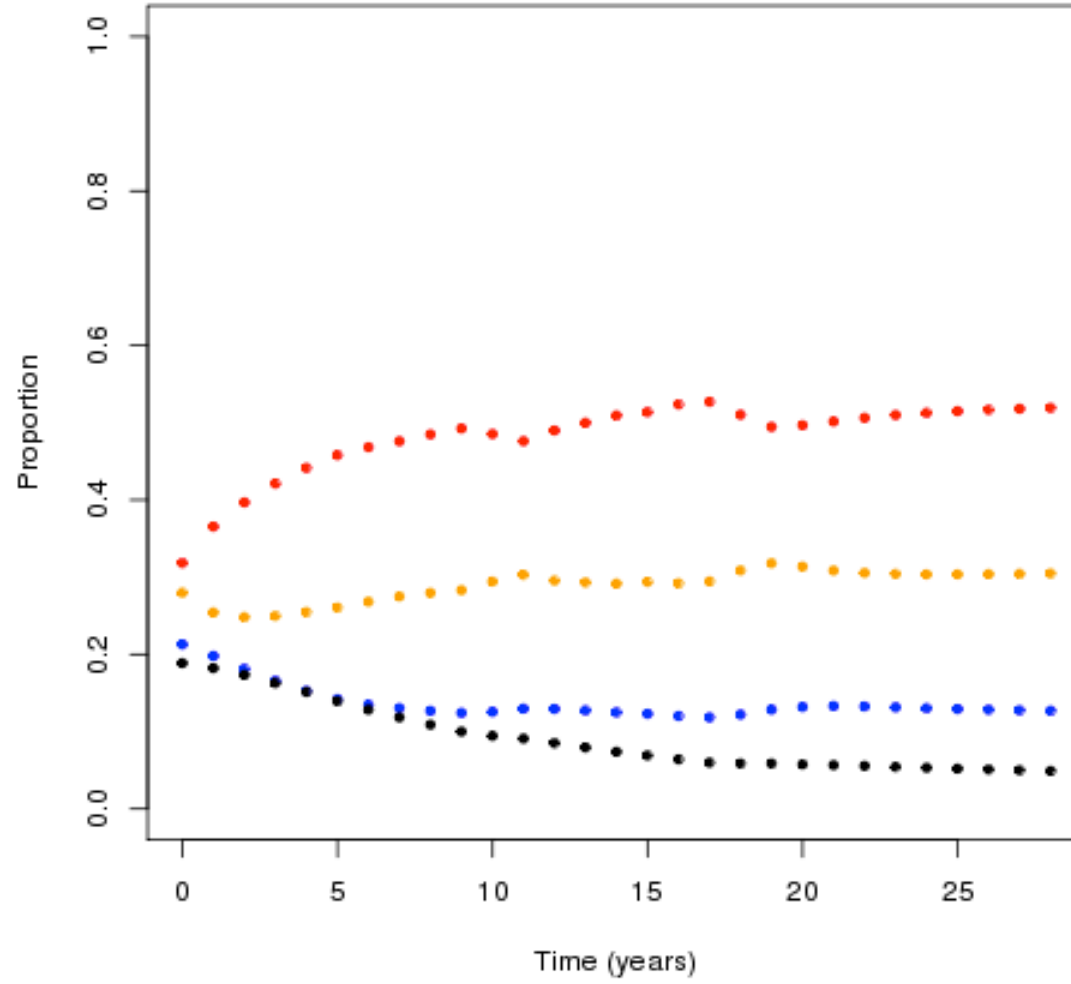
NewMexico



NewMexico



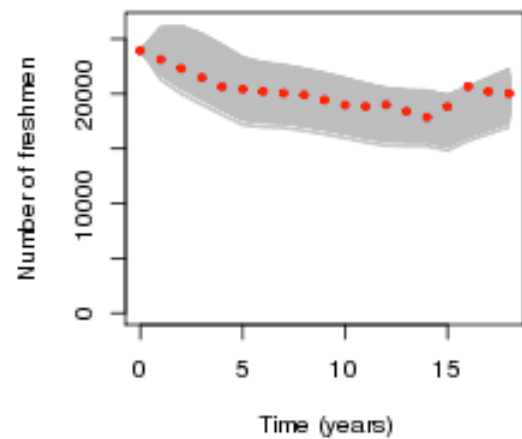
New Mexico Ten Year Forecast



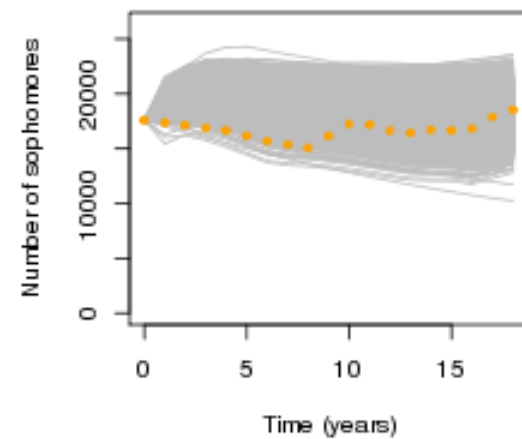
New York

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.333	0.2524	0.1802	0.2503	0.5742	0.7371	0.8585
<i>Standard Errors</i>	0.2182	0.2035	0.1865	0.0277	0.2756	0.2342	0.1843

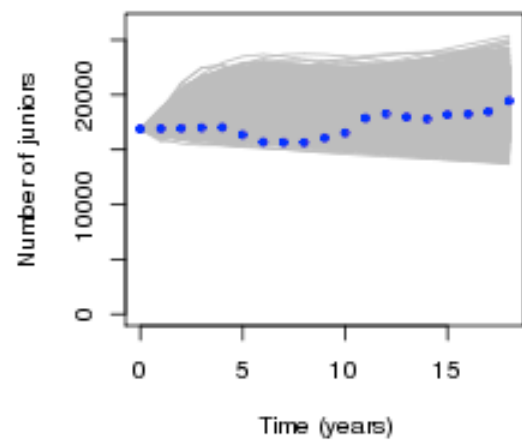
NewYork



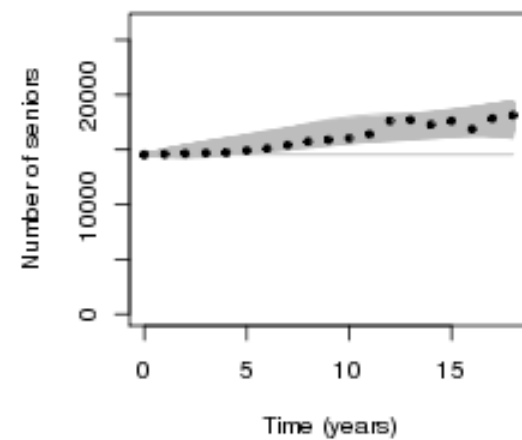
NewYork



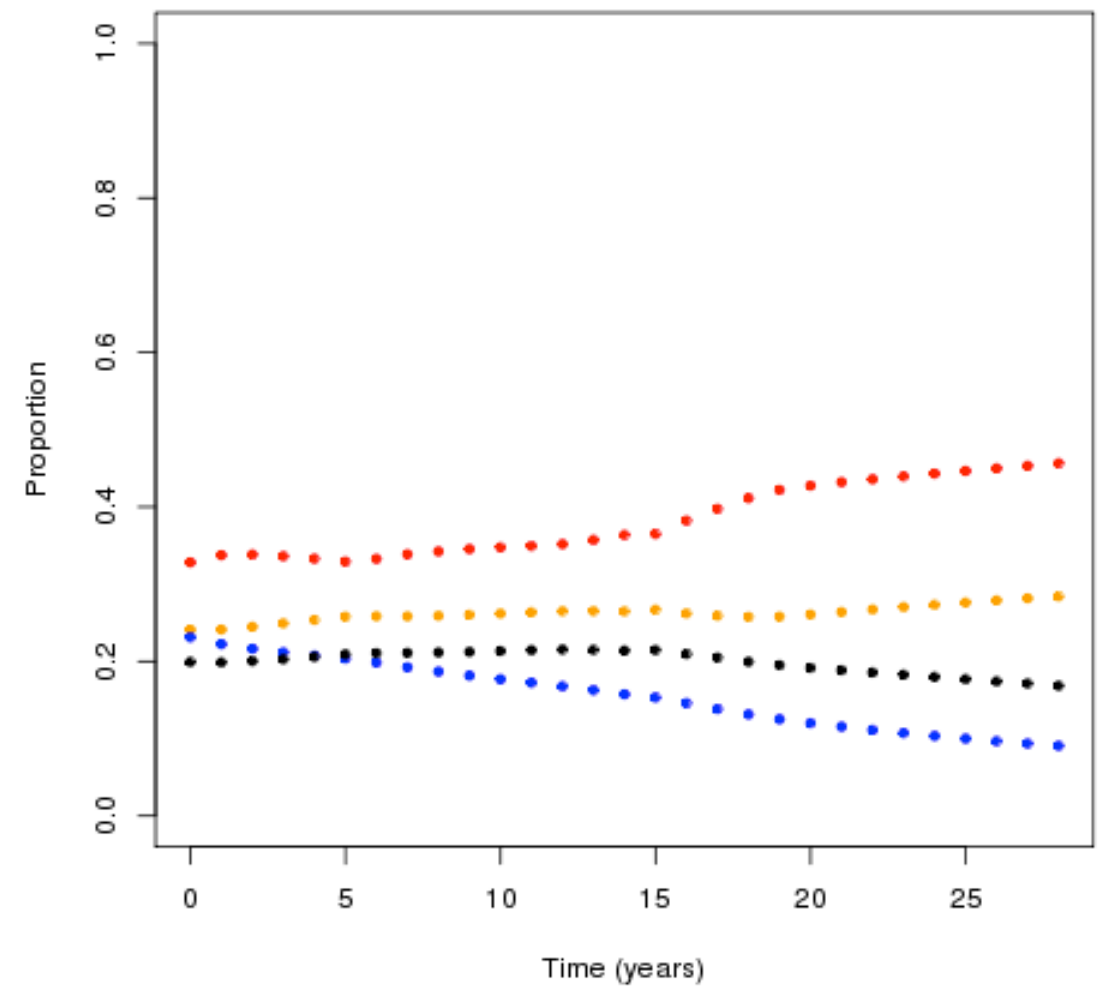
NewYork



NewYork

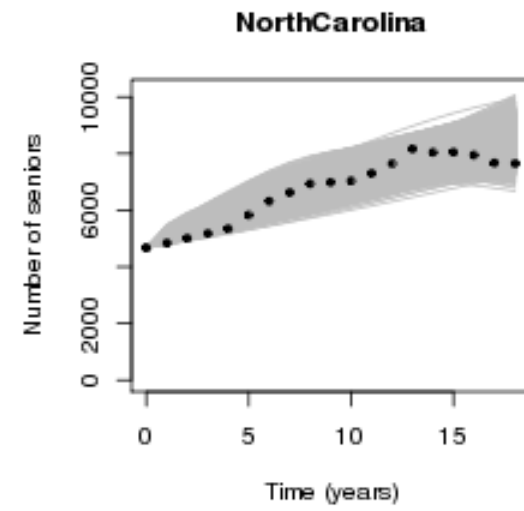
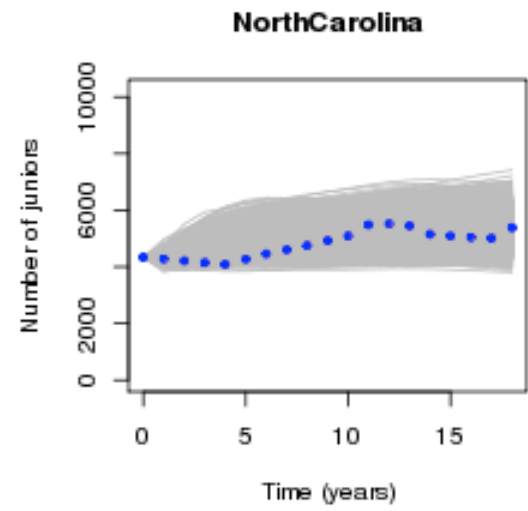
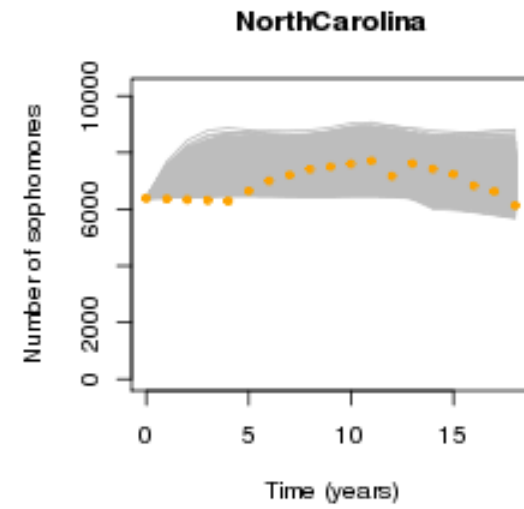
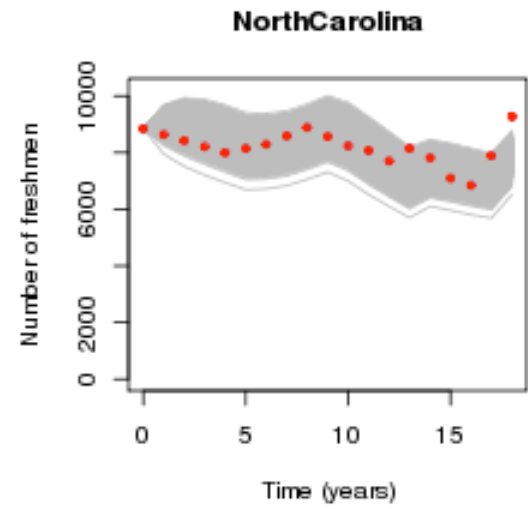


New York Ten Year Forecast

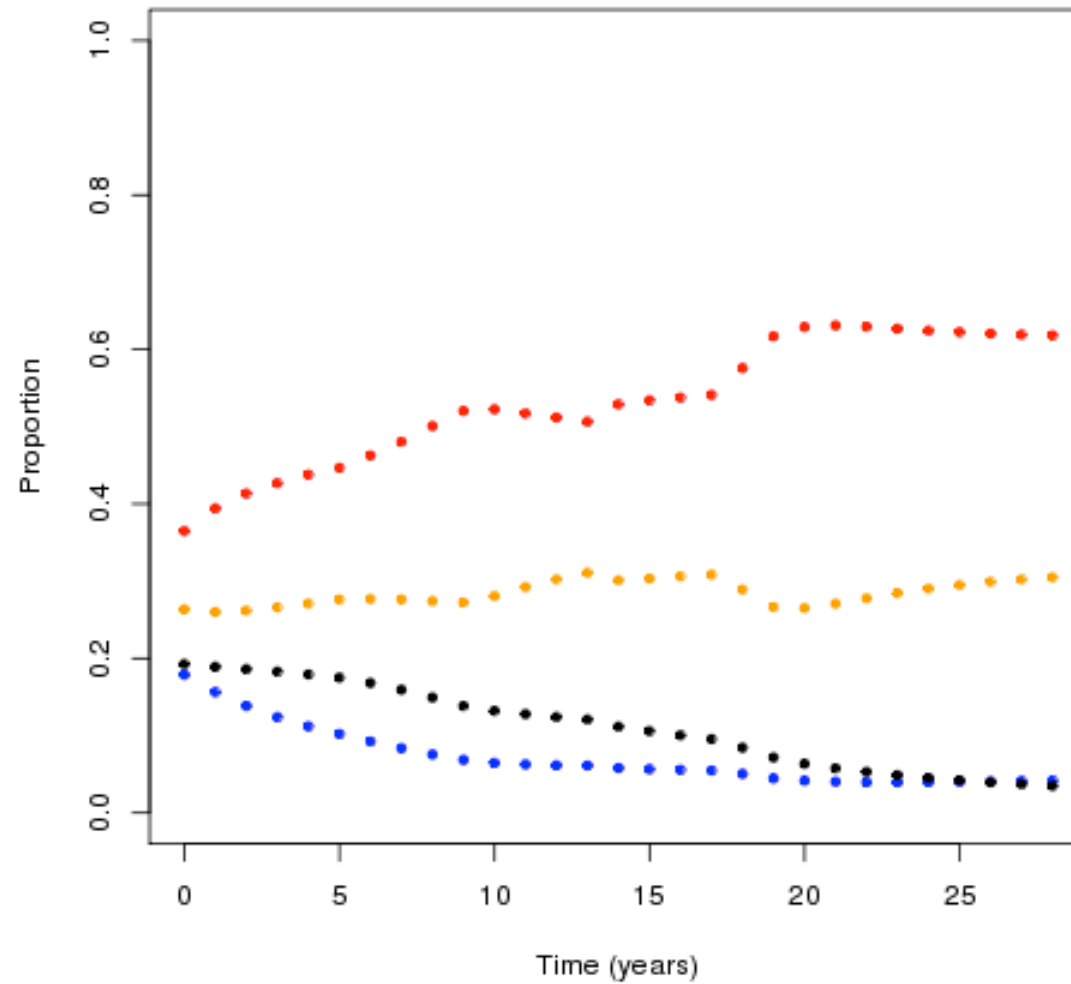


North Carolina

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1215	0.0738	0.0325	0.3149	0.8679	0.933	0.9752
<i>Standard Errors</i>	0.1285	0.0896	0.0357	0.0267	0.1479	0.0891	0.0416



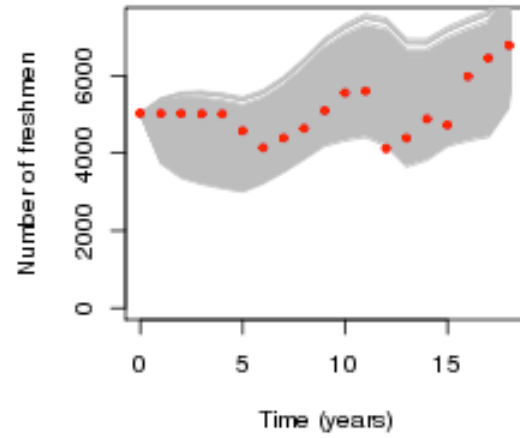
North Carolina Ten Year Forecast



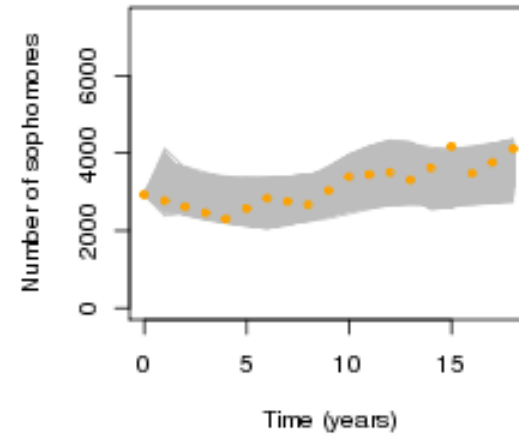
North Dakota

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1815	0.1546	0.168	0.4334	0.7998	0.789	0.9043
<i>Standard Errors</i>	0.0942	0.0824	0.0953	0.0212	0.1081	0.1198	0.0745

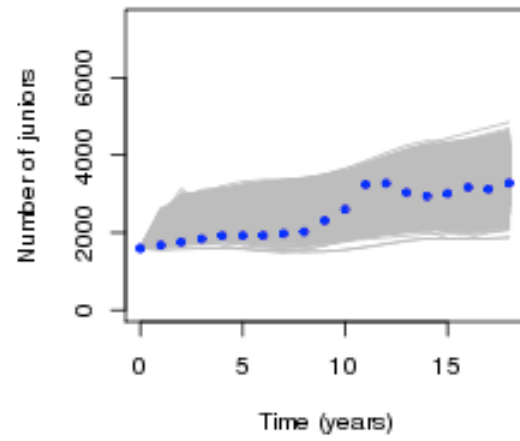
NorthDakota



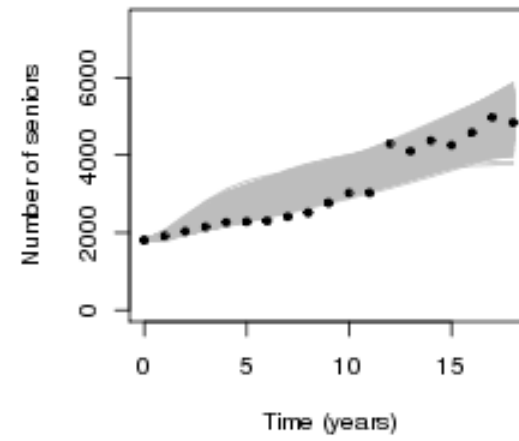
NorthDakota



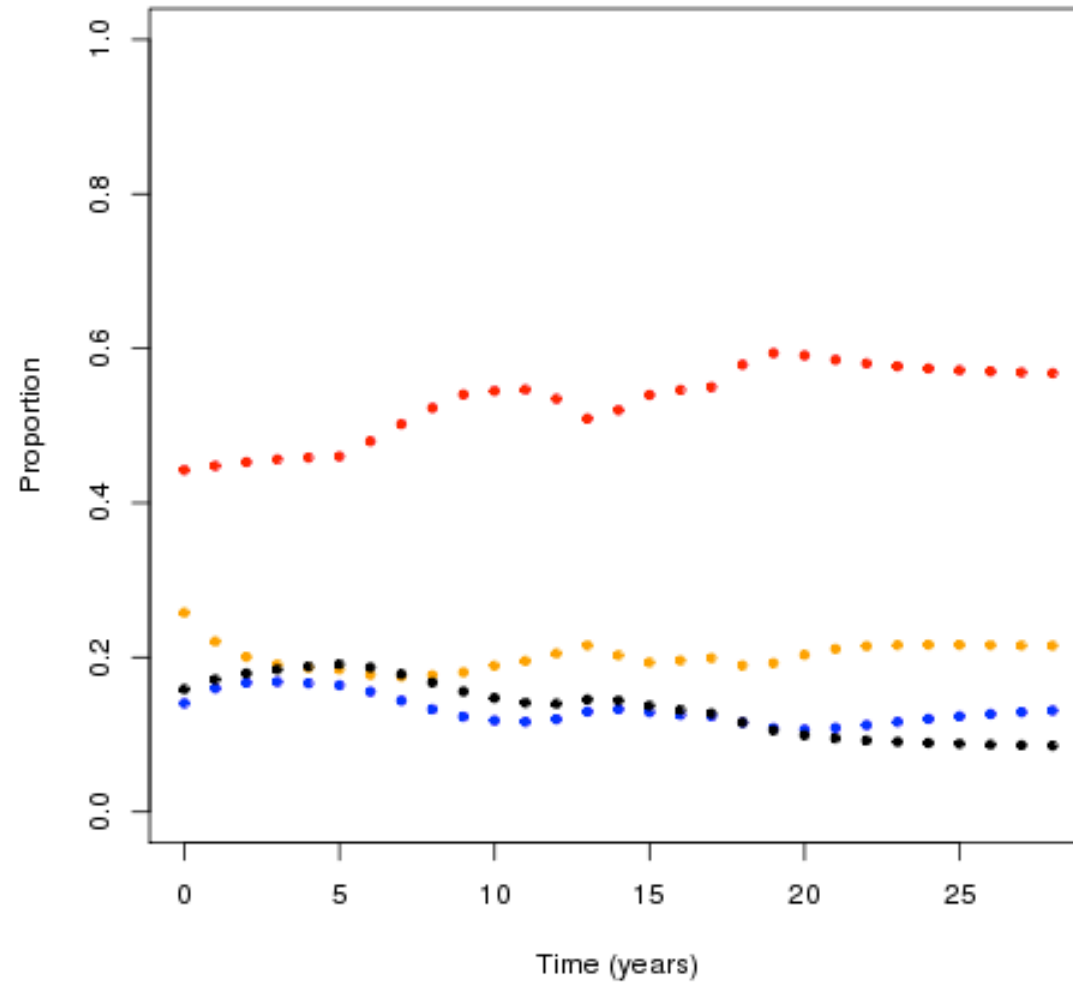
NorthDakota



NorthDakota



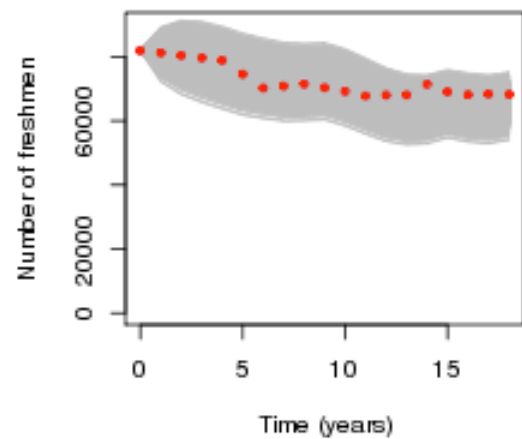
North Dakota Ten Year Forecast



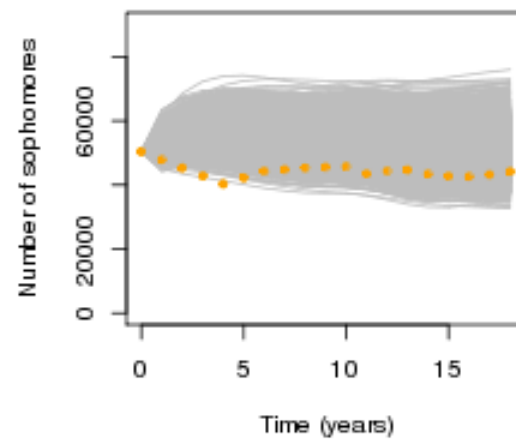
Ohio

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.4123	0.1907	0.1083	0.42	0.3691	0.8167	0.9646
<i>Standard Errors</i>	0.1795	0.11	0.0649	0.0458	0.2795	0.1363	0.0577

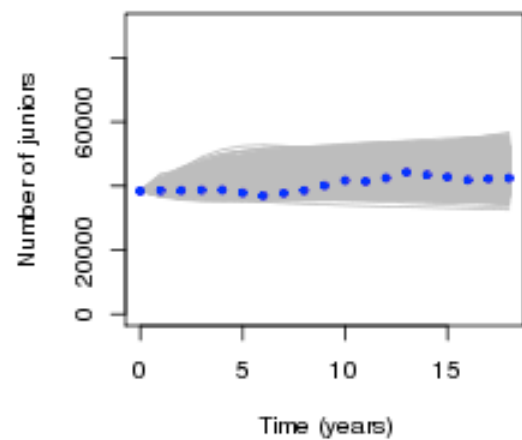
Ohio



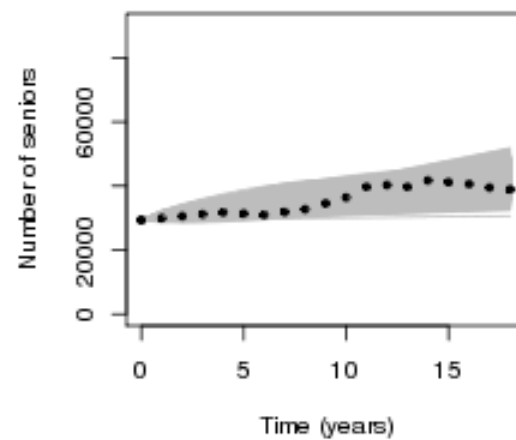
Ohio



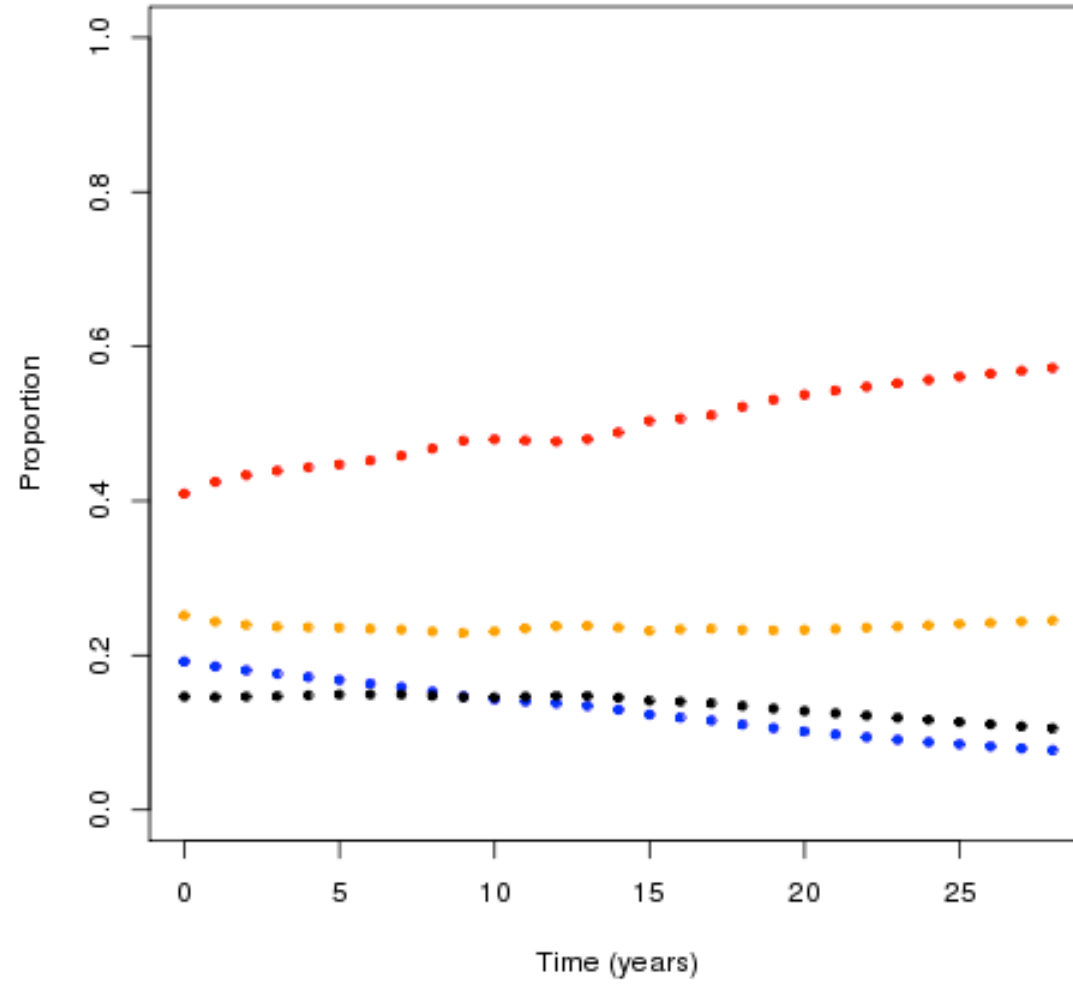
Ohio



Ohio



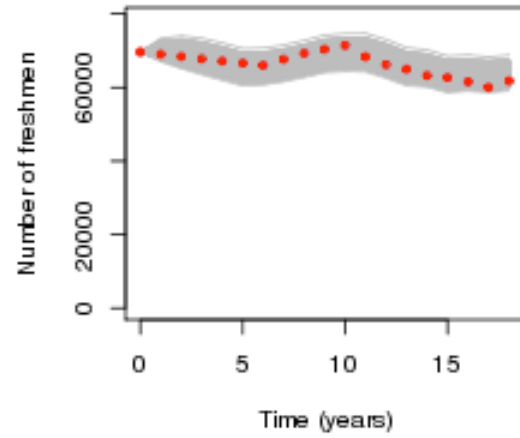
Ohio Ten Year Forecast



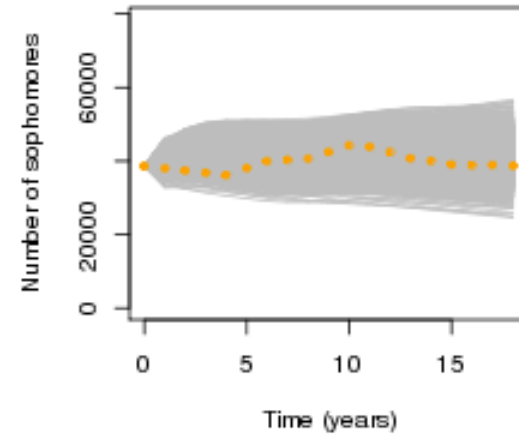
Oklahoma

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1367	0.0679	0.045	0.4001	0.8084	0.9244	0.9663
<i>Standard Errors</i>	0.1495	0.0672	0.0516	0.0261	0.2188	0.0841	0.0625

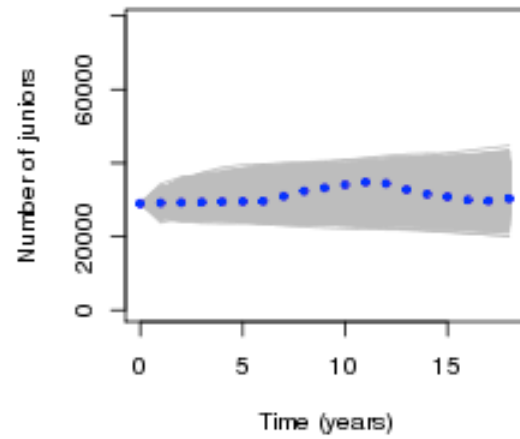
Oklahoma



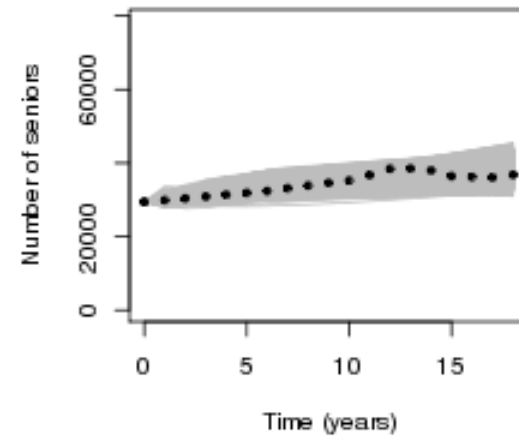
Oklahoma



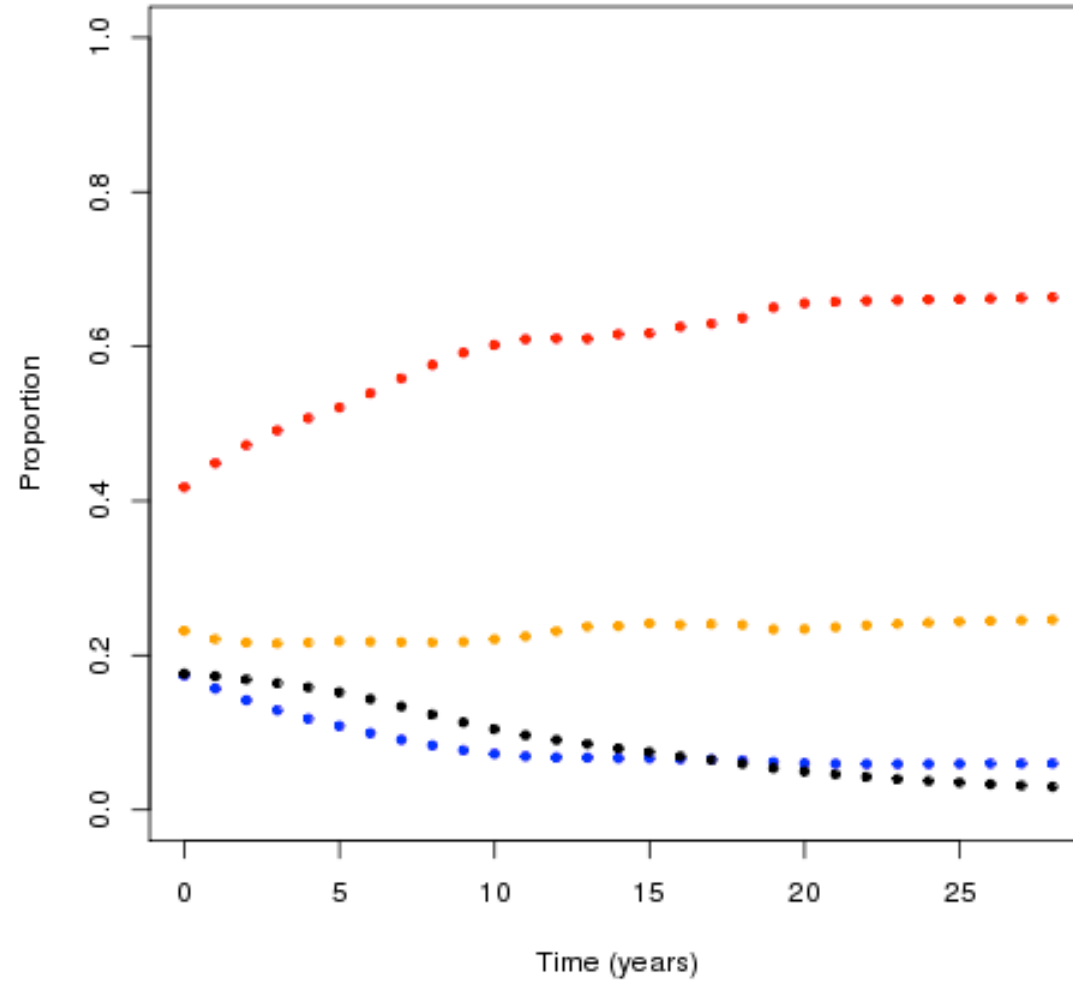
Oklahoma



Oklahoma

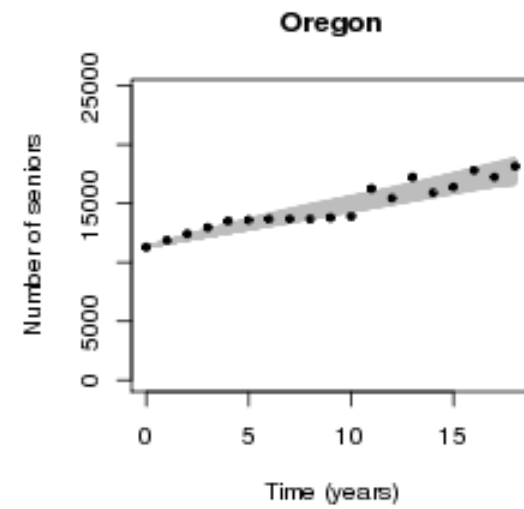
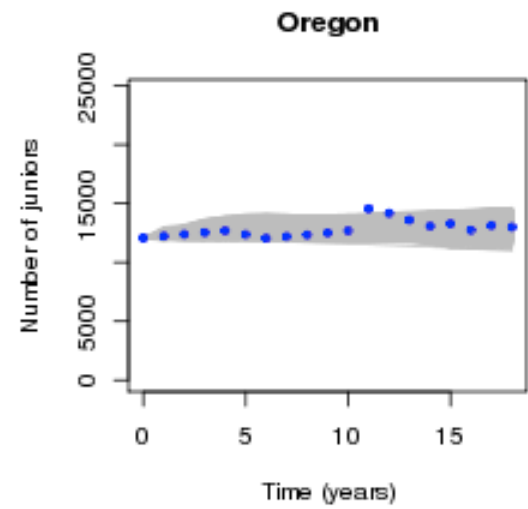
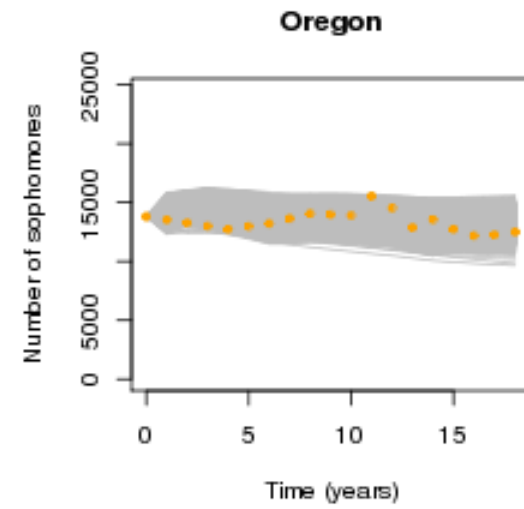
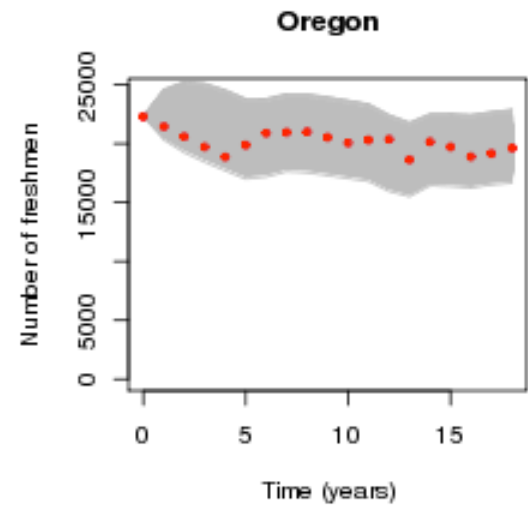


Oklahoma Ten Year Forecast

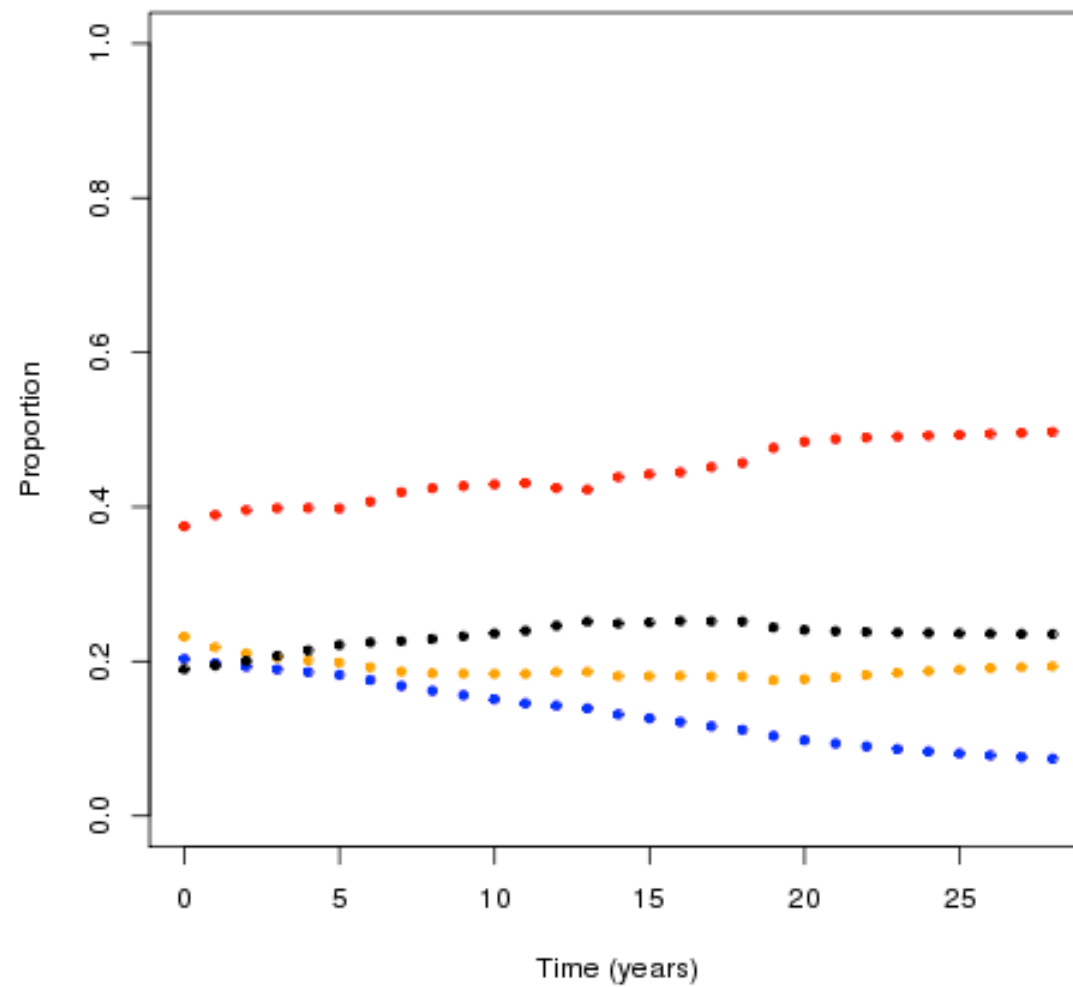


Oregon

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.197	0.1793	0.1361	0.4025	0.6834	0.7709	0.8904
<i>Standard Errors</i>	0.1596	0.1643	0.1387	0.0115	0.2676	0.2169	0.1312

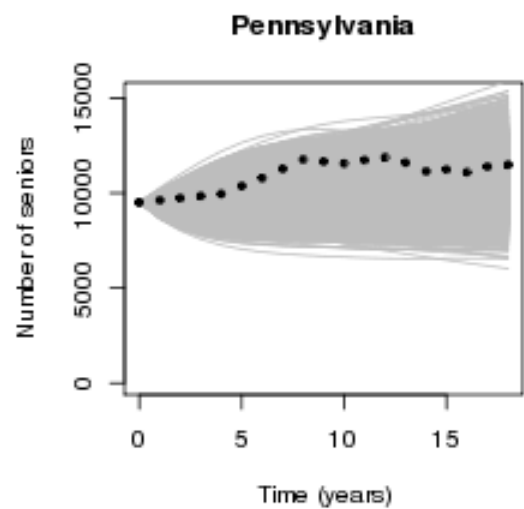
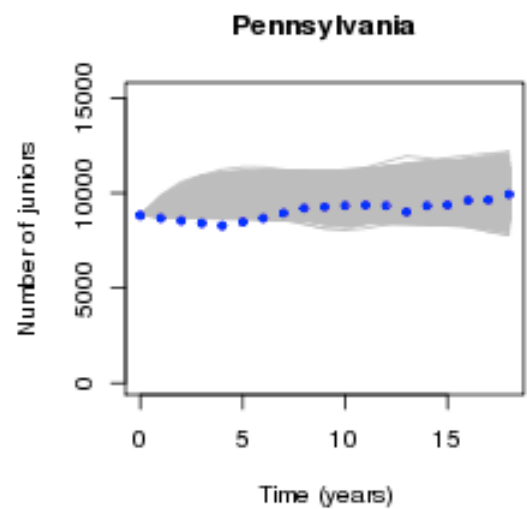
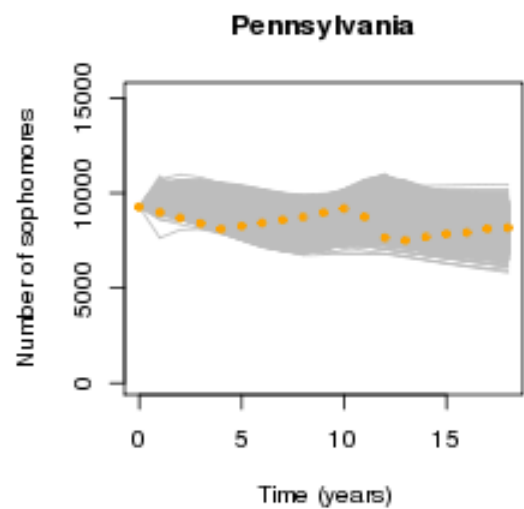
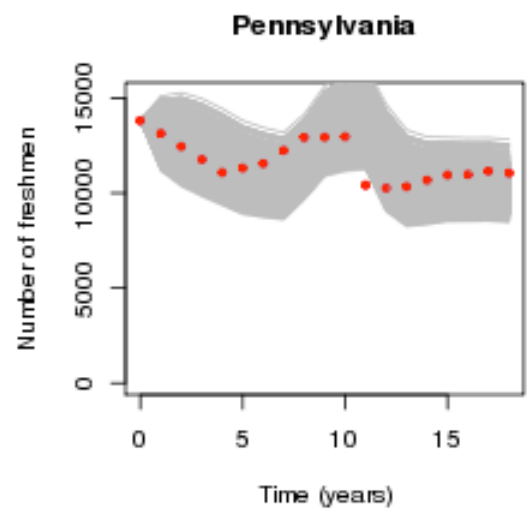


Oregon Ten Year Forecast

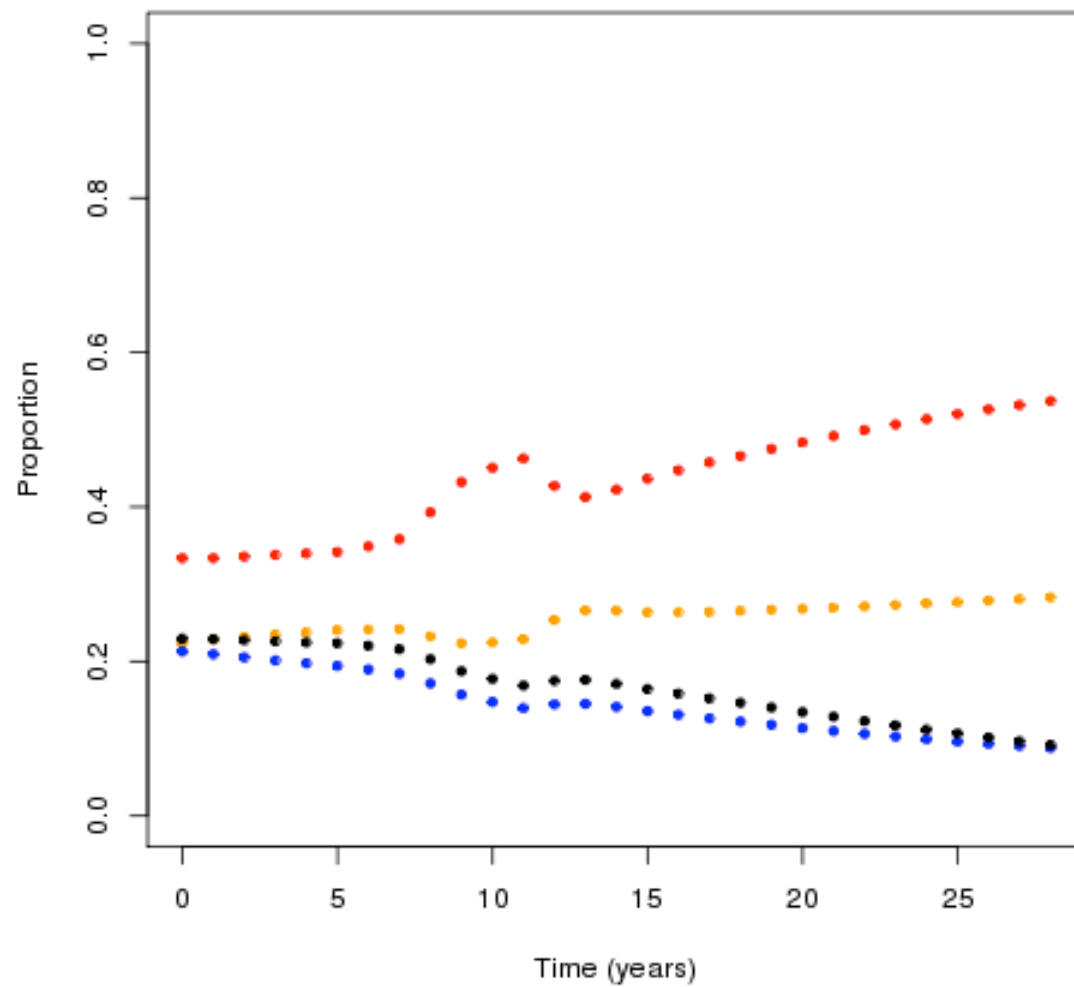


Pennsylvania

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1526	0.0702	0.0333	0.4089	0.7716	0.9296	0.9953
<i>Standard Errors</i>	0.1466	0.059	0.0133	0.026	0.2233	0.0648	0.0125



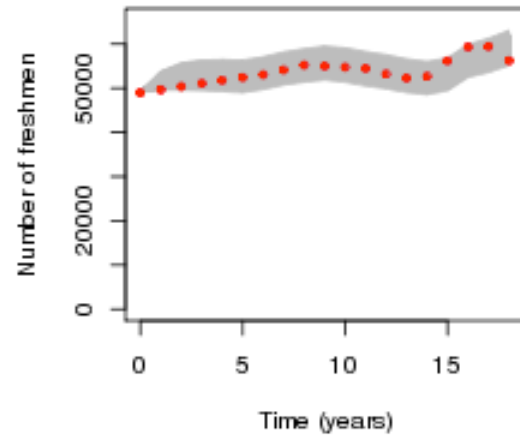
Pennsylvania Ten Year Forecast



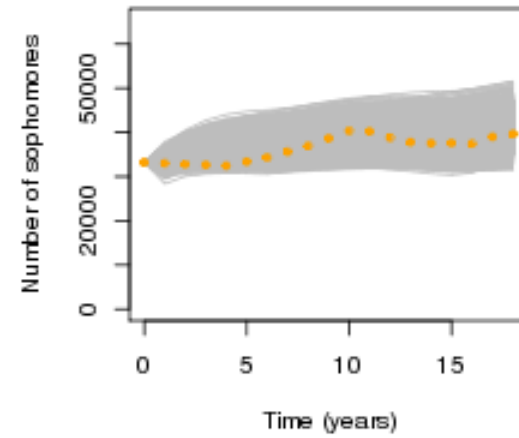
Rhode Island

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1175	0.1048	0.0736	0.2976	0.8402	0.9104	0.9353
<i>Standard Errors</i>	0.097	0.0915	0.084	0.0407	0.1293	0.0861	0.0812

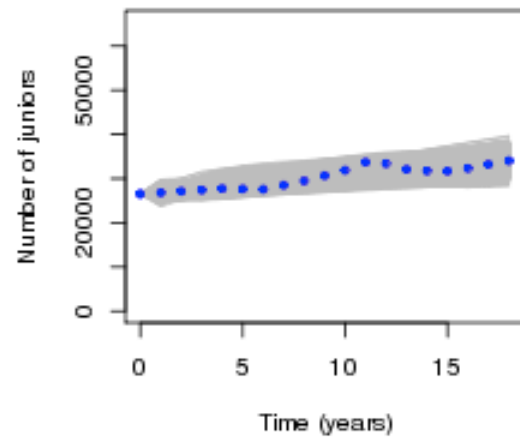
Rhode Island



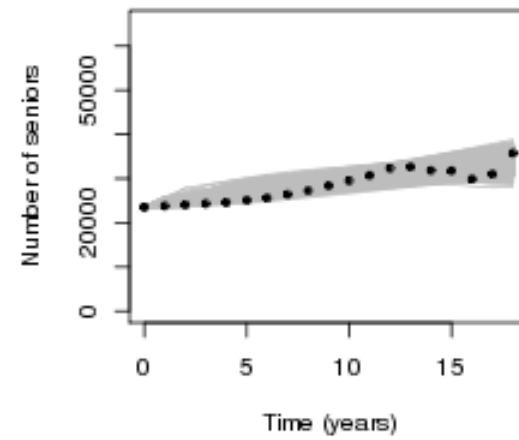
Rhode Island



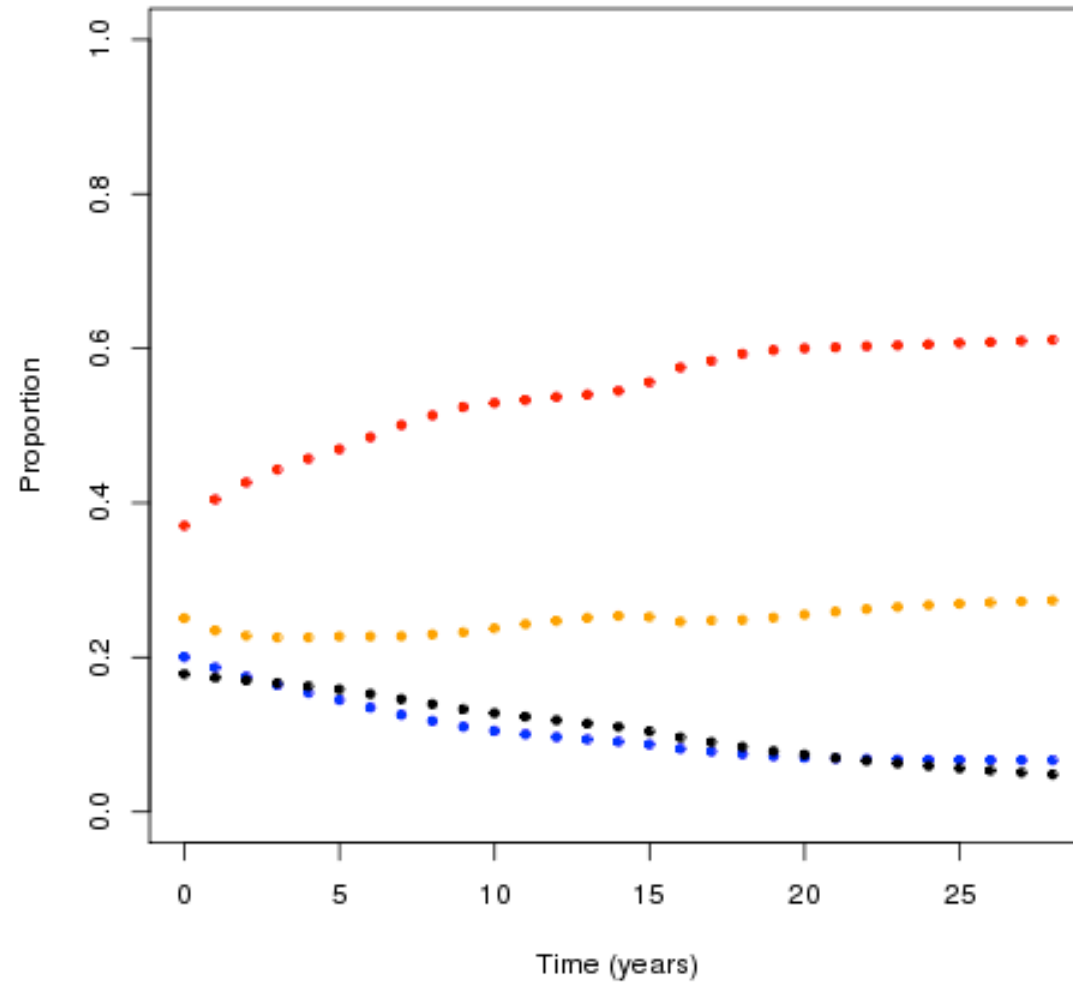
Rhode Island



Rhode Island



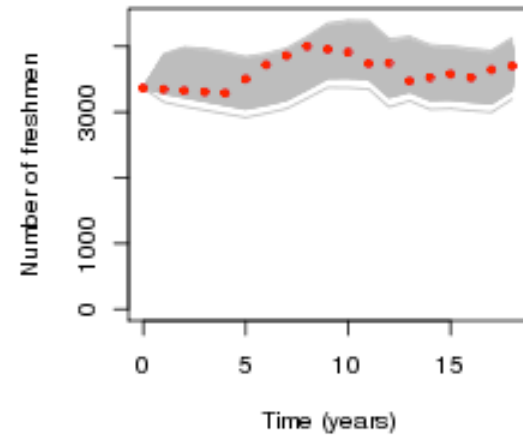
Rhode Island Ten Year Forecast



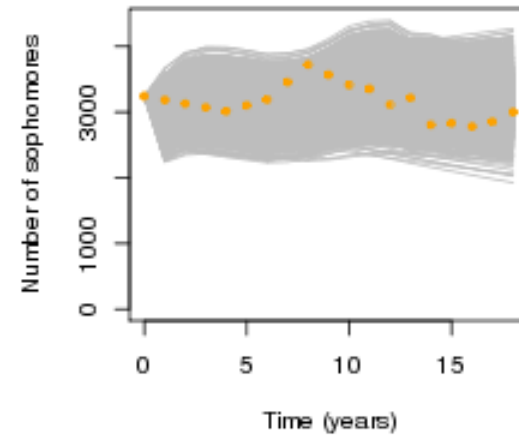
South Carolina

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.2006	0.1203	0.0808	0.3884	0.7272	0.8638	0.9343
<i>Standard Errors</i>	0.1713	0.1203	0.0919	0.0109	0.2465	0.1513	0.0989

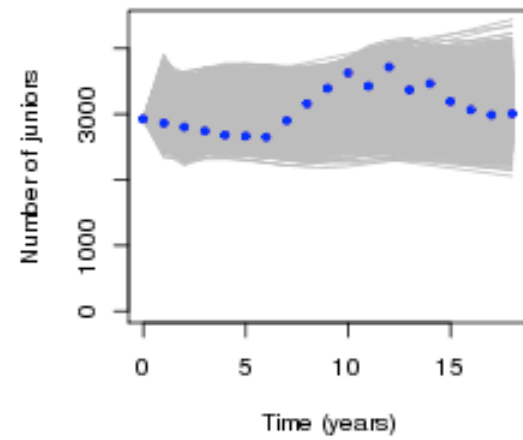
SouthCarolina



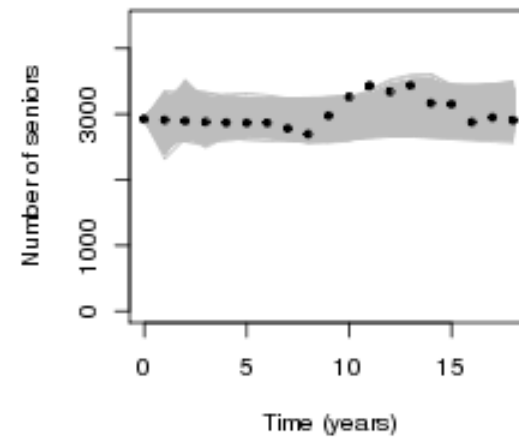
SouthCarolina



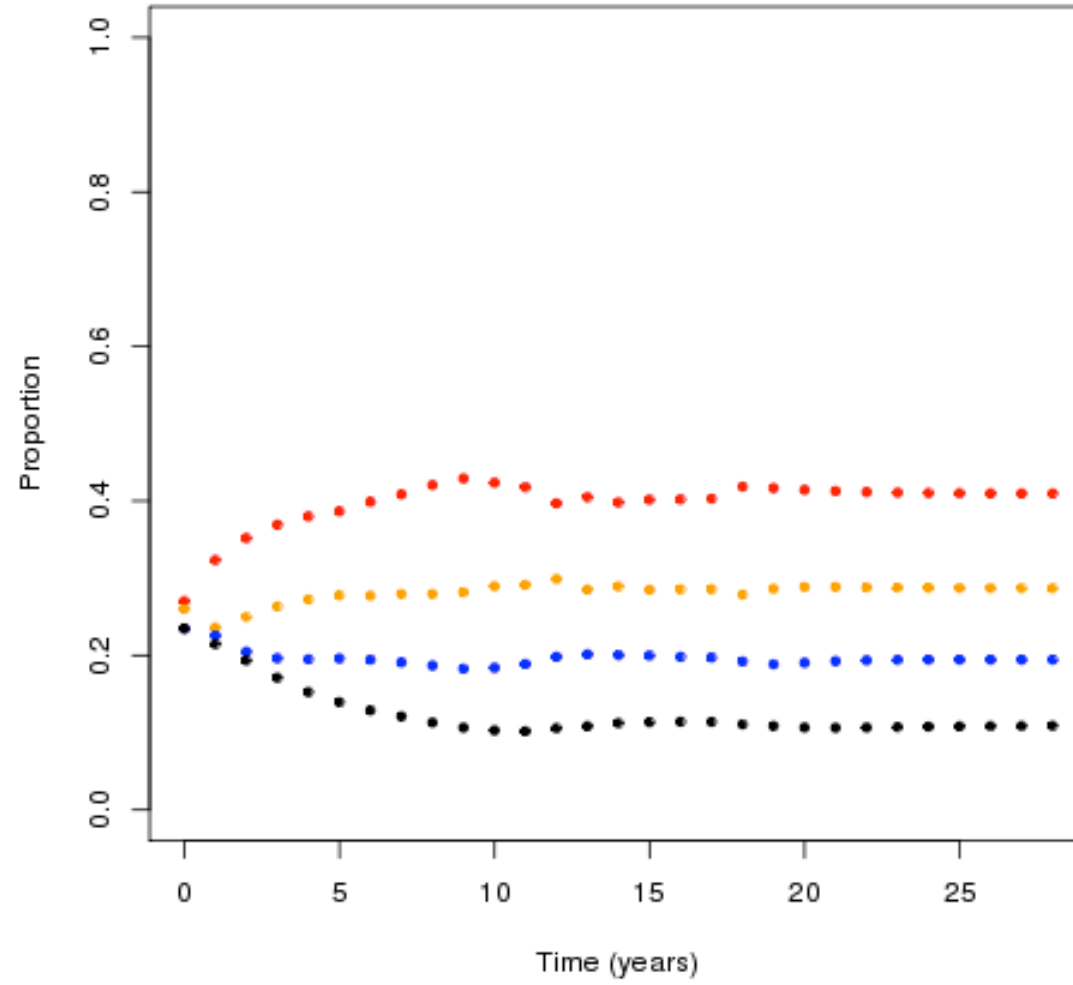
SouthCarolina



SouthCarolina



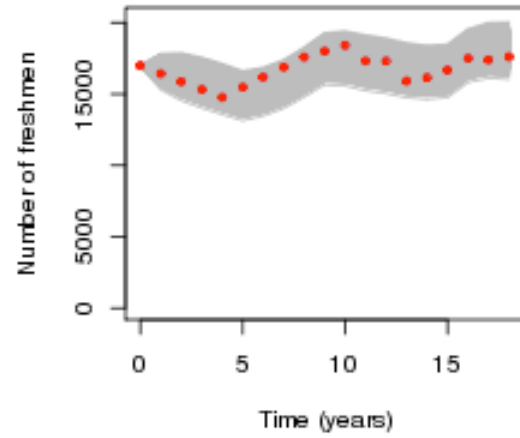
South Carolina Ten Year Forecast



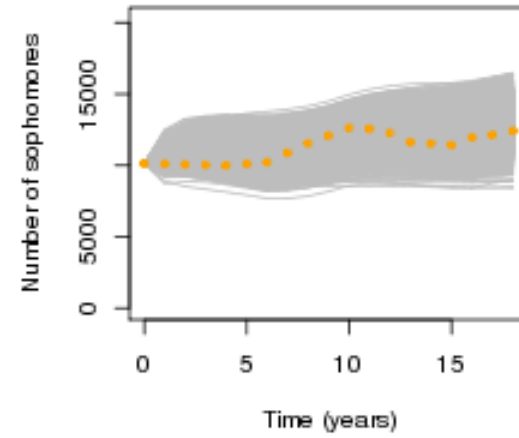
South Dakota

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.6214	0.5542	0.4093	0.211	0.3001	0.4275	0.5819
<i>Standard Errors</i>	0.2537	0.3454	0.3581	0.0251	0.2862	0.3593	0.3687

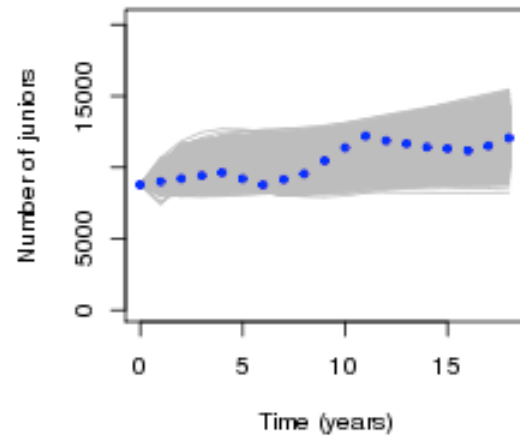
SouthDakota



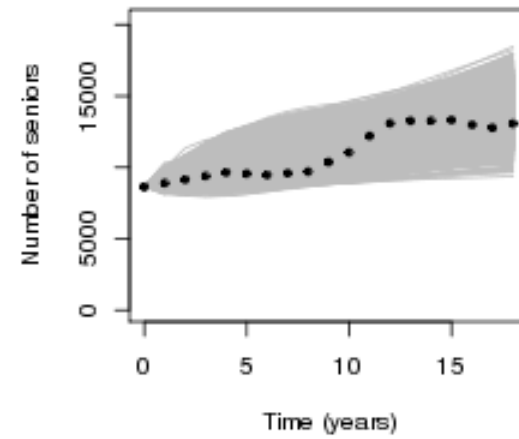
SouthDakota



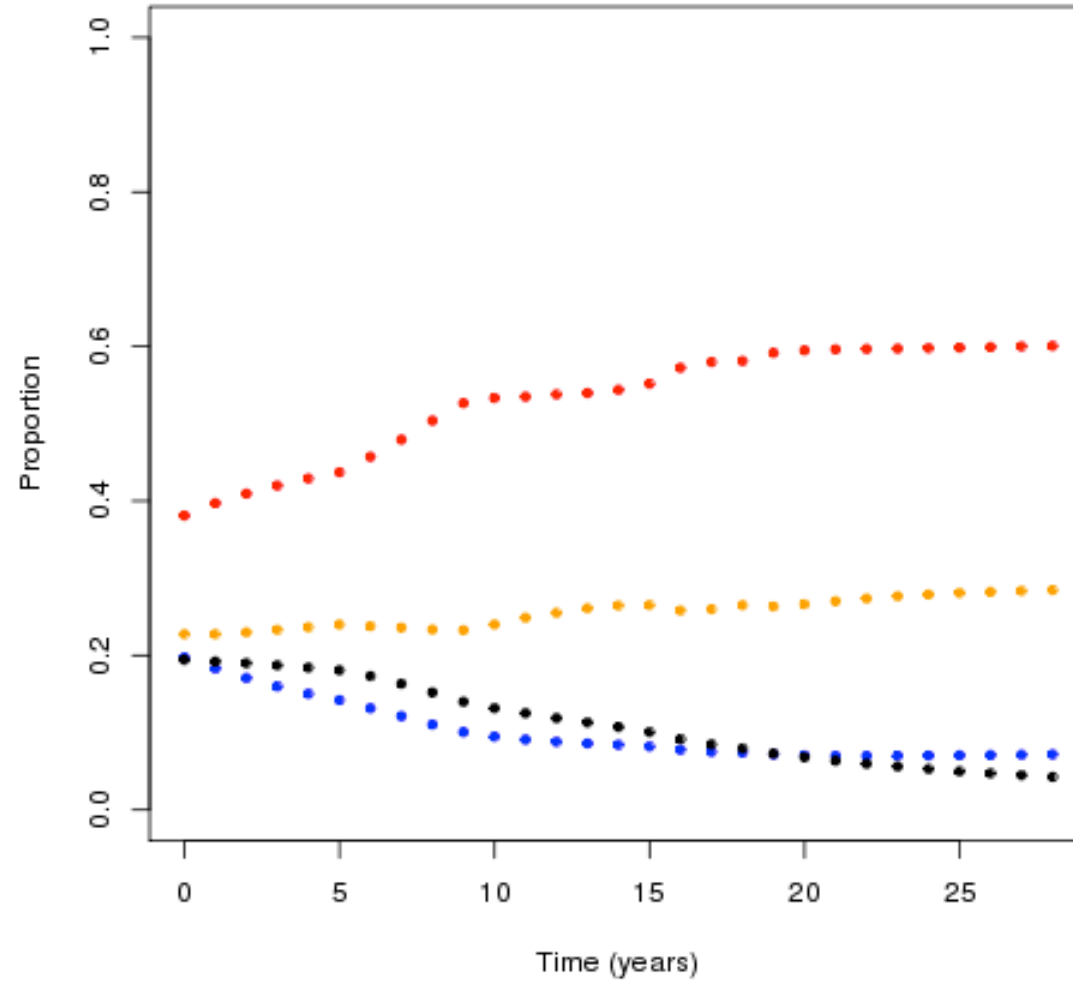
SouthDakota



SouthDakota



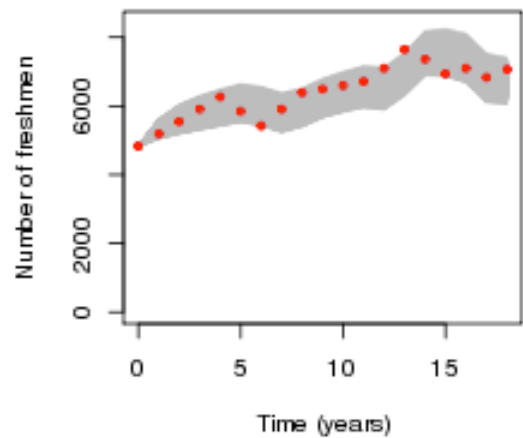
South Dakota Ten Year Forecast



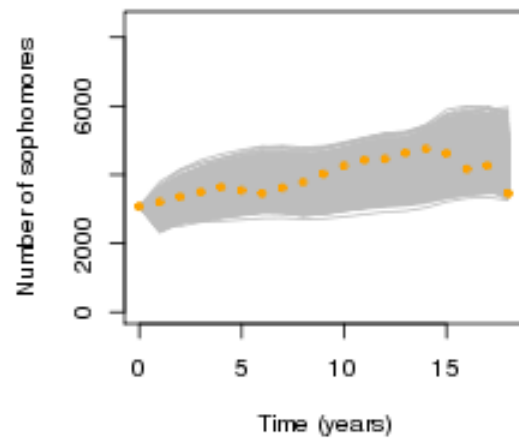
Tennessee

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1893	0.1704	0.1183	0.3462	0.7404	0.8283	0.9166
<i>Standard Errors</i>	0.1432	0.1517	0.1372	0.02	0.2196	0.1682	0.1287

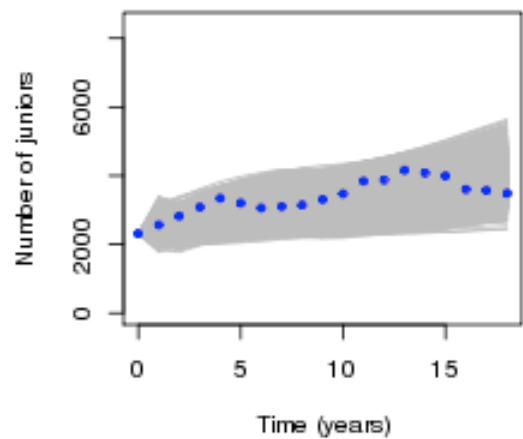
Tennessee



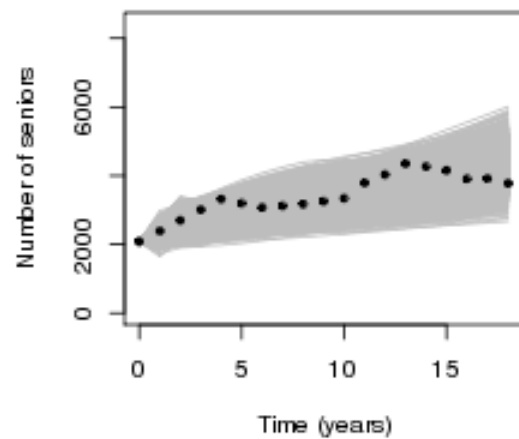
Tennessee



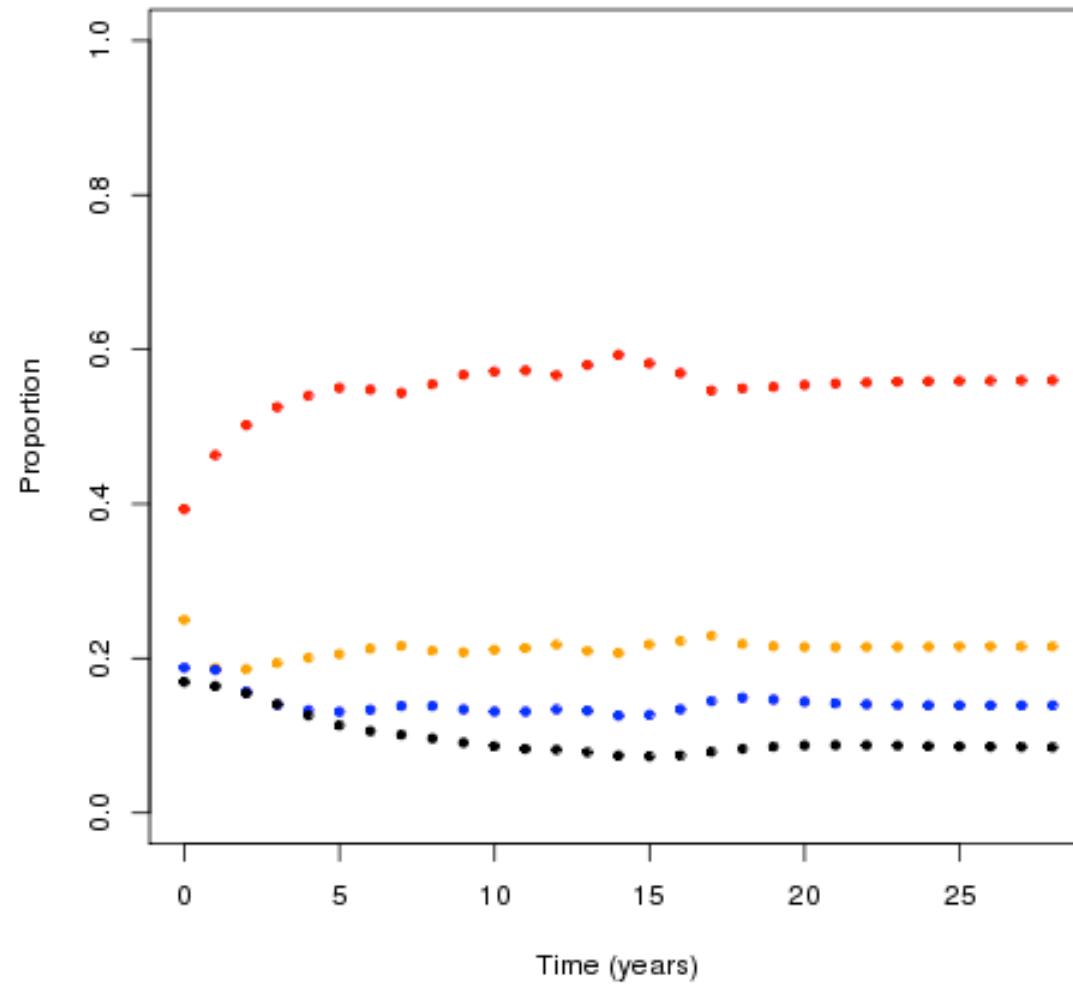
Tennessee



Tennessee



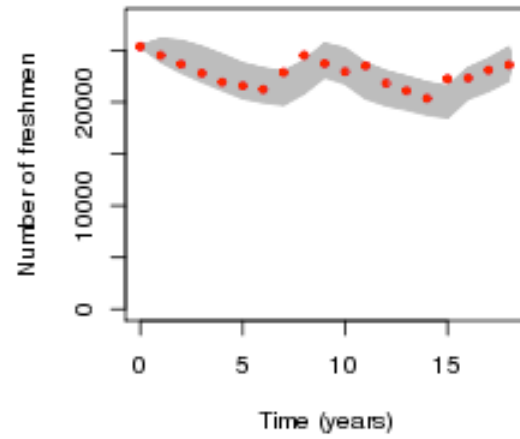
Tennessee Ten Year Forecast



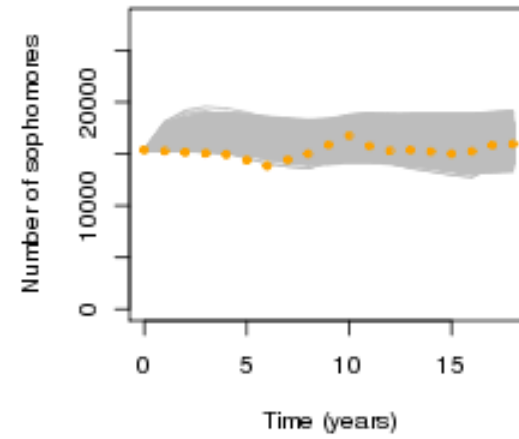
Texas

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.4592	0.4459	0.3162	0.3754	0.2547	0.4851	0.7315
<i>Standard Errors</i>	0.1715	0.2624	0.2794	0.017	0.2819	0.3209	0.2761

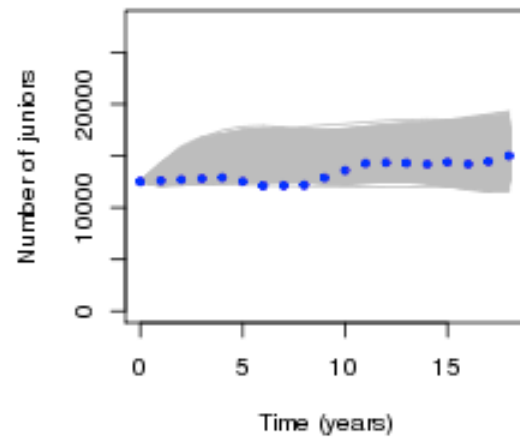
Texas



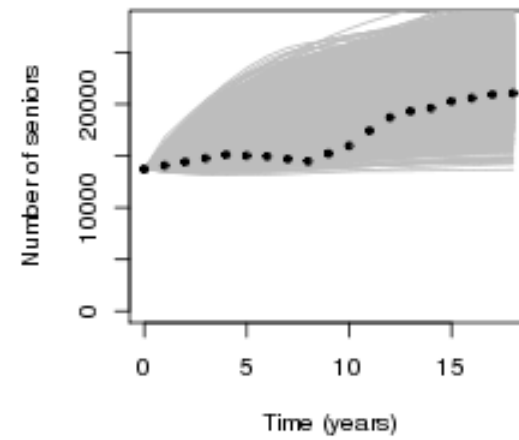
Texas



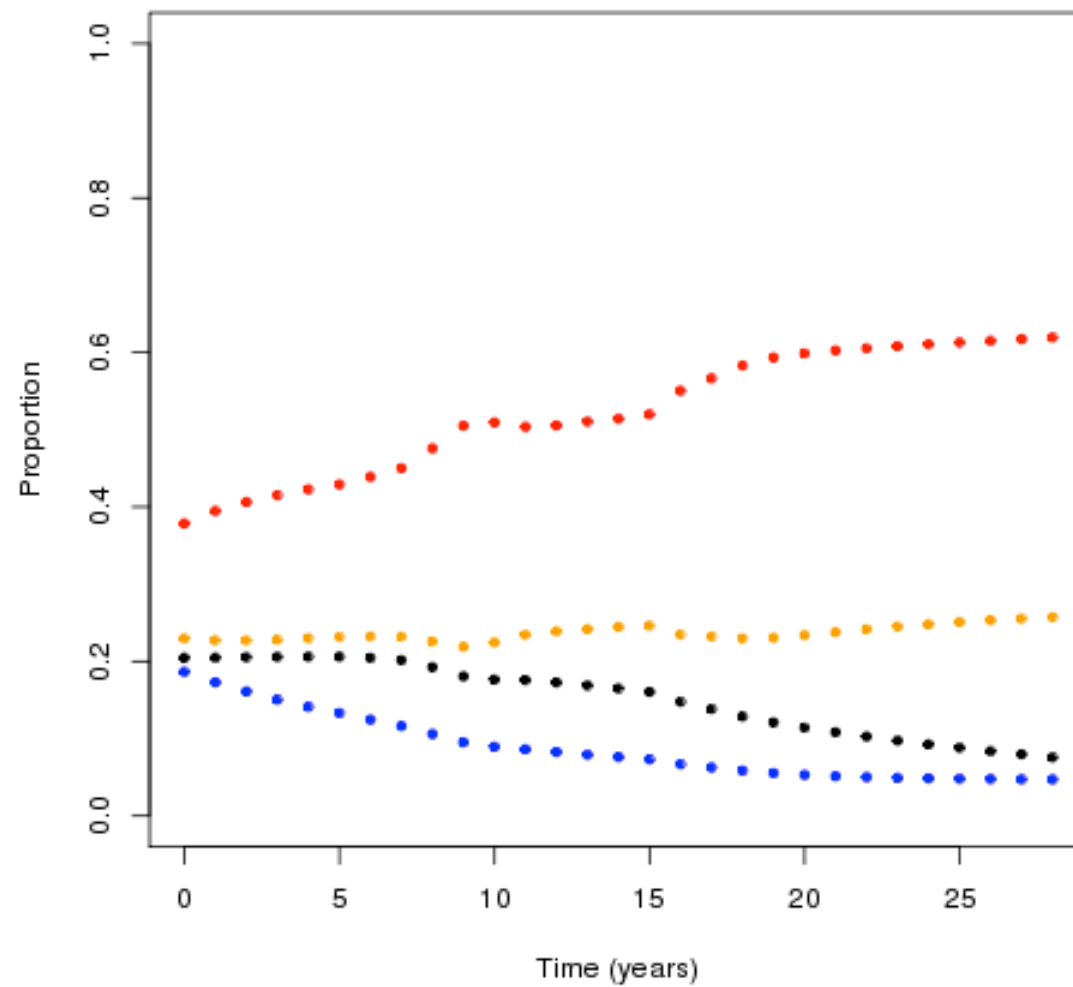
Texas



Texas



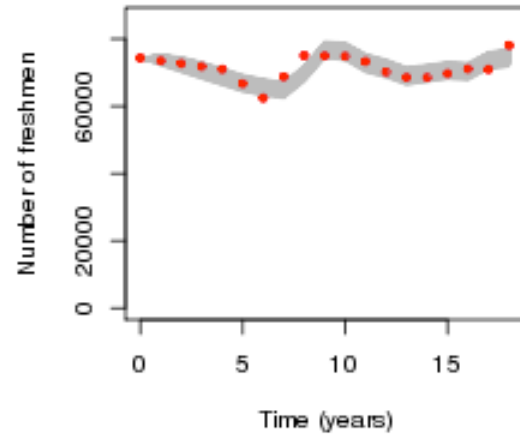
Texas Ten Year Forecast



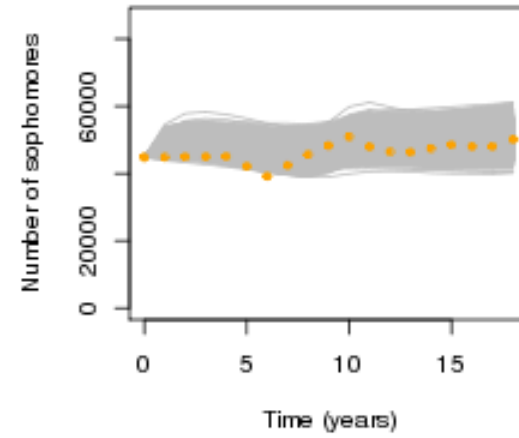
Utah

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1342	0.1409	0.1176	0.4113	0.8127	0.8508	0.938
<i>Standard Errors</i>	0.0897	0.1064	0.1155	0.011	0.1277	0.1214	0.0876

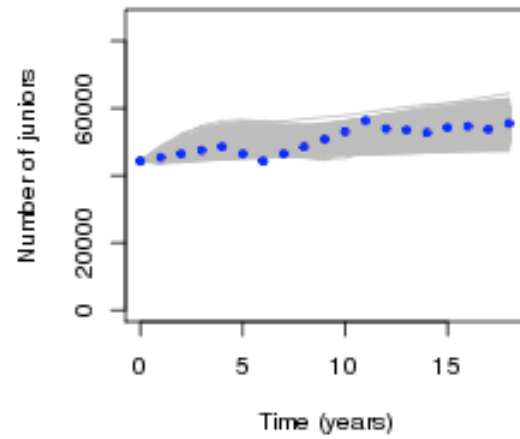
Utah



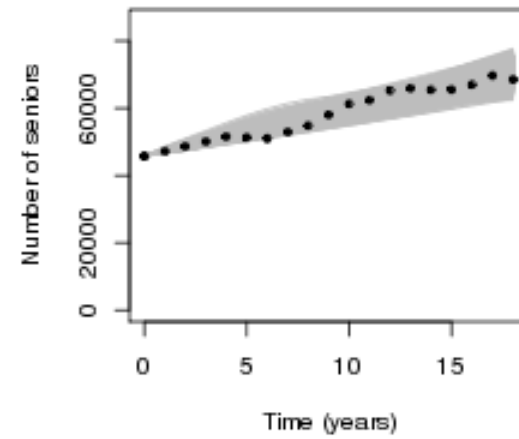
Utah



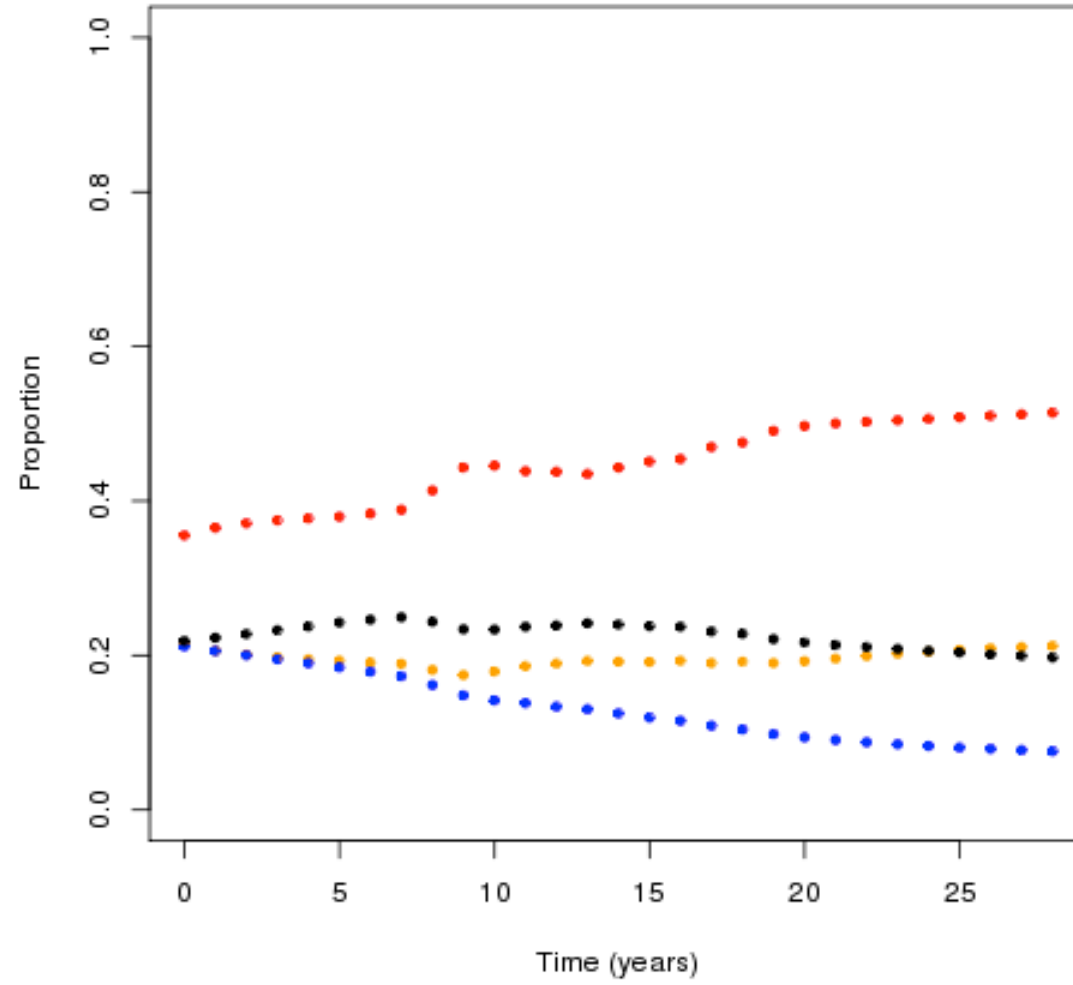
Utah



Utah



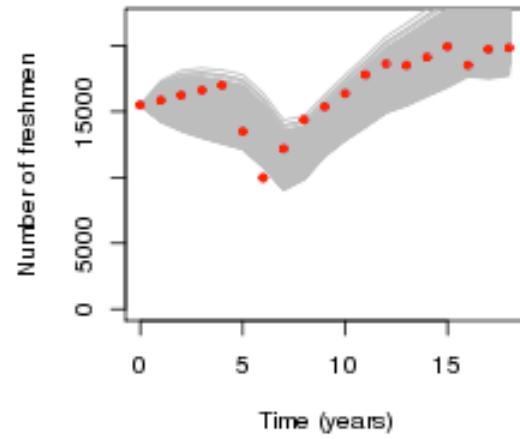
Utah Ten Year Forecast



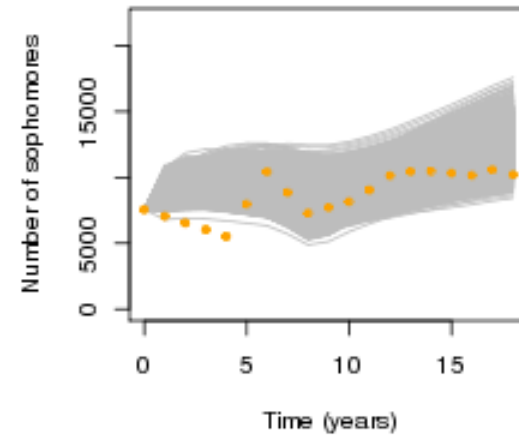
Vermont

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1533	0.0974	0.0457	0.394	0.7779	0.9191	0.9841
<i>Standard Errors</i>	0.1292	0.0766	0.0362	0.0055	0.1926	0.0738	0.0323

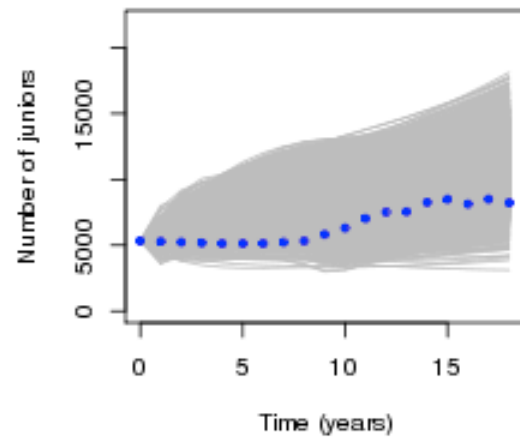
Vermont



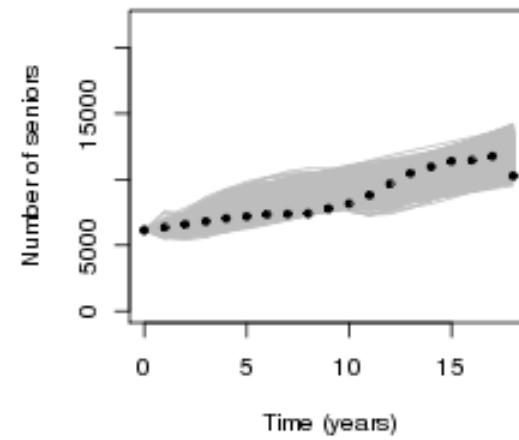
Vermont



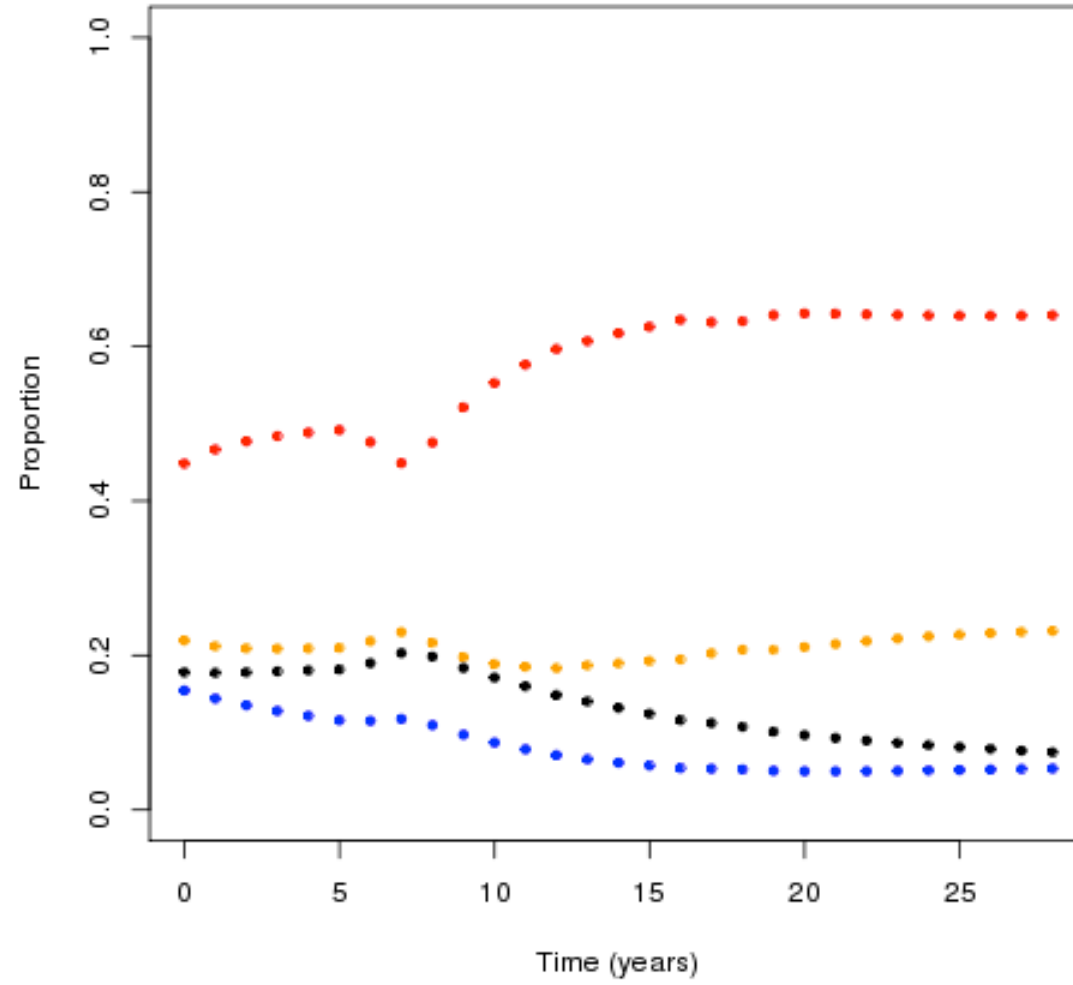
Vermont



Vermont



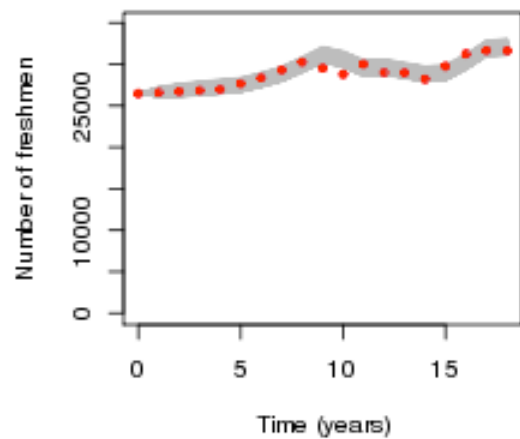
Vermont Ten Year Forecast



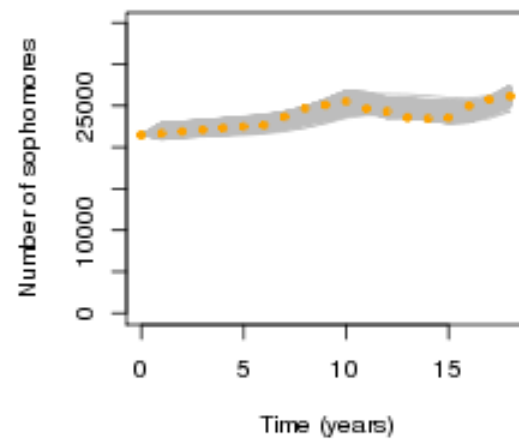
Virginia

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1565	0.151	0.0784	0.4588	0.7697	0.8595	0.9634
<i>Standard Errors</i>	0.1219	0.1165	0.0793	0.028	0.2072	0.1495	0.0737

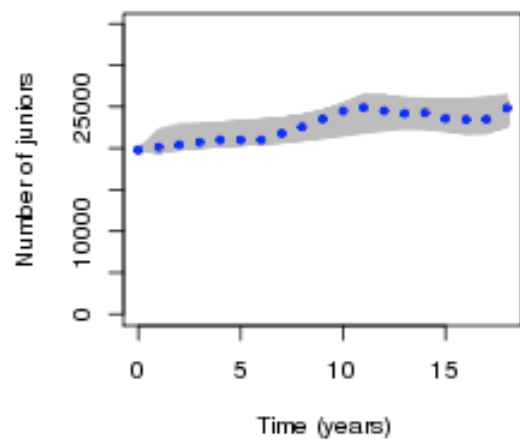
Virginia



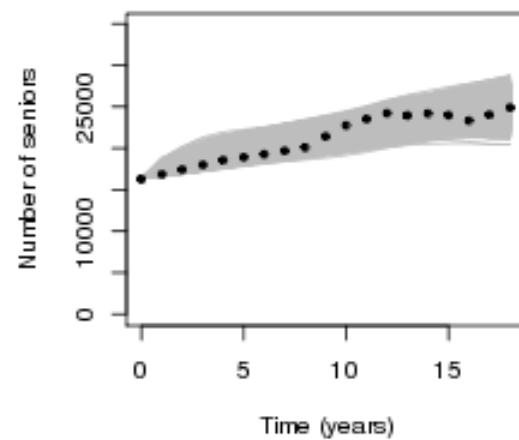
Virginia



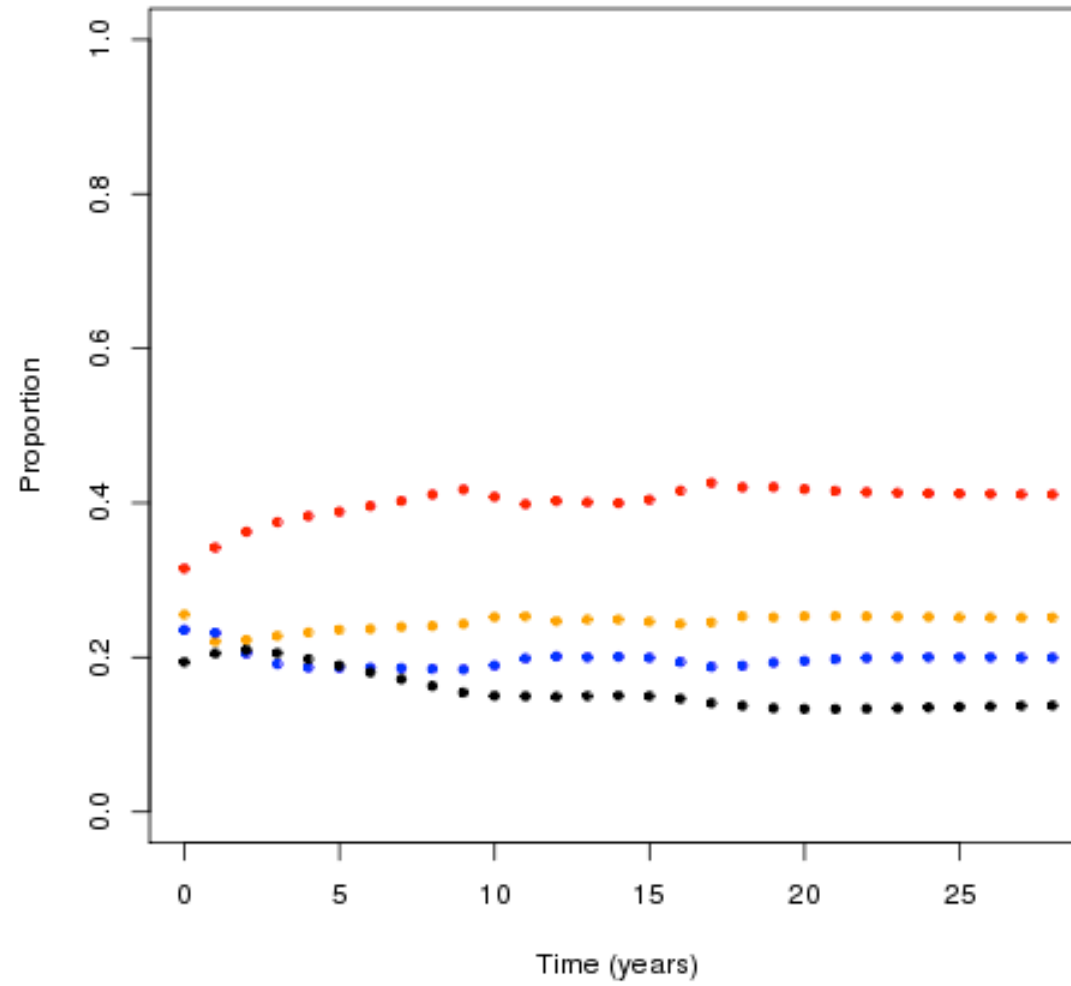
Virginia



Virginia



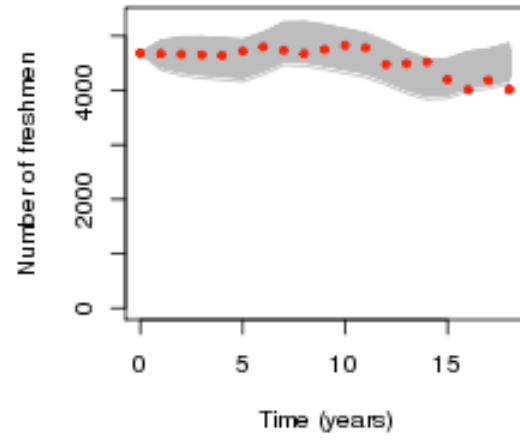
Virginia Ten Year Forecast



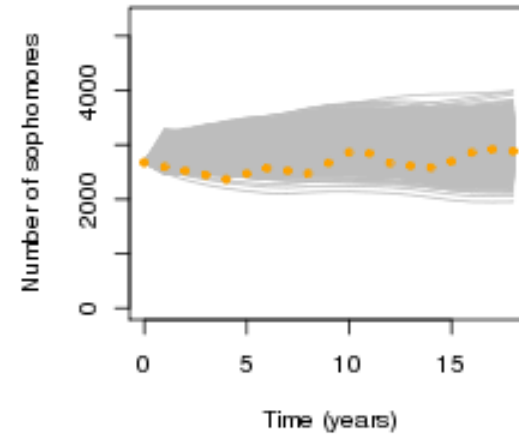
Washington

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.6836	0.6344	0.1597	0.2681	0.1825	0.3467	0.8527
<i>Standard Errors</i>	0.0996	0.2234	0.1207	0.0064	0.1206	0.2343	0.1308

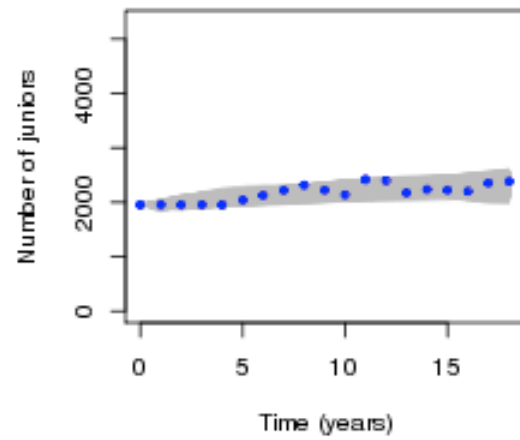
Washington



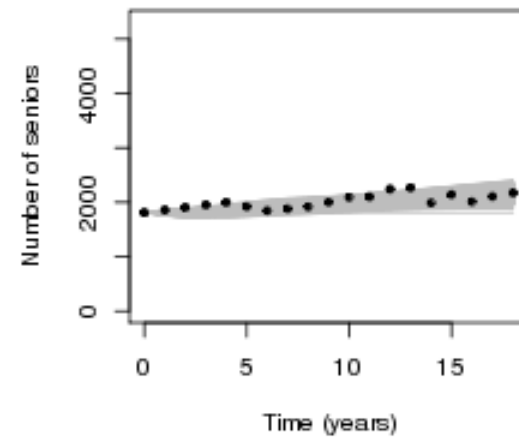
Washington



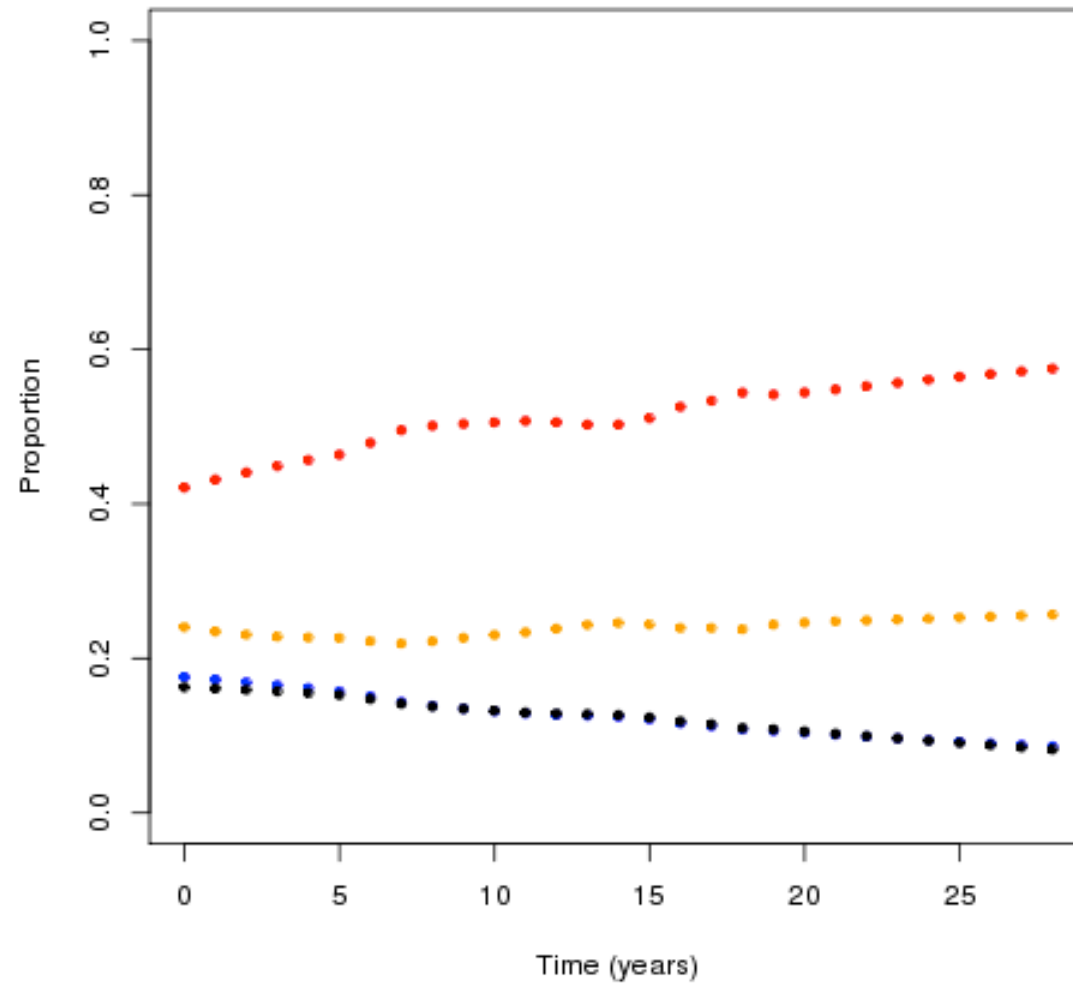
Washington



Washington



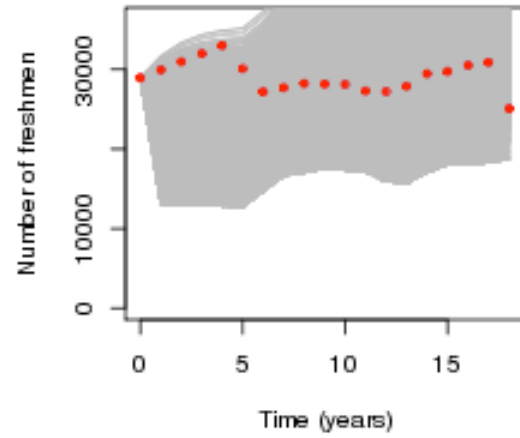
Washington Ten Year Forecast



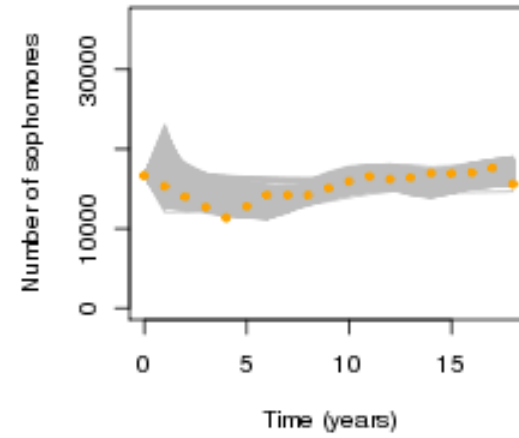
Washington D.C.

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.1554	0.054	0.0456	0.3238	0.764	0.9359	0.9595
<i>Standard Errors</i>	0.1779	0.0565	0.0622	0.0144	0.2831	0.0802	0.0692

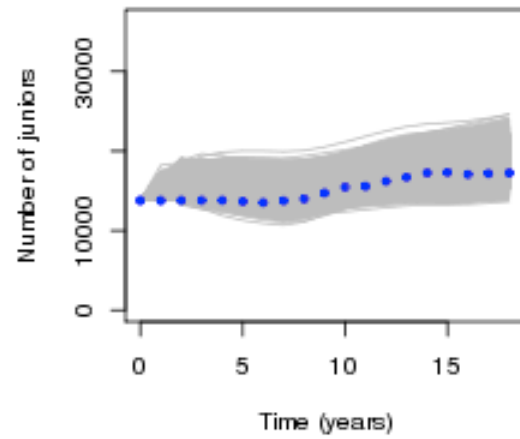
WashingtonDC



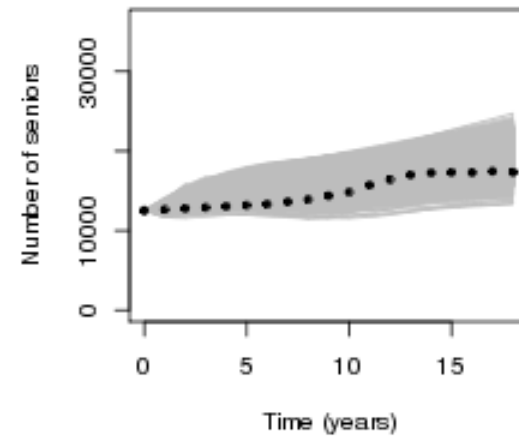
WashingtonDC



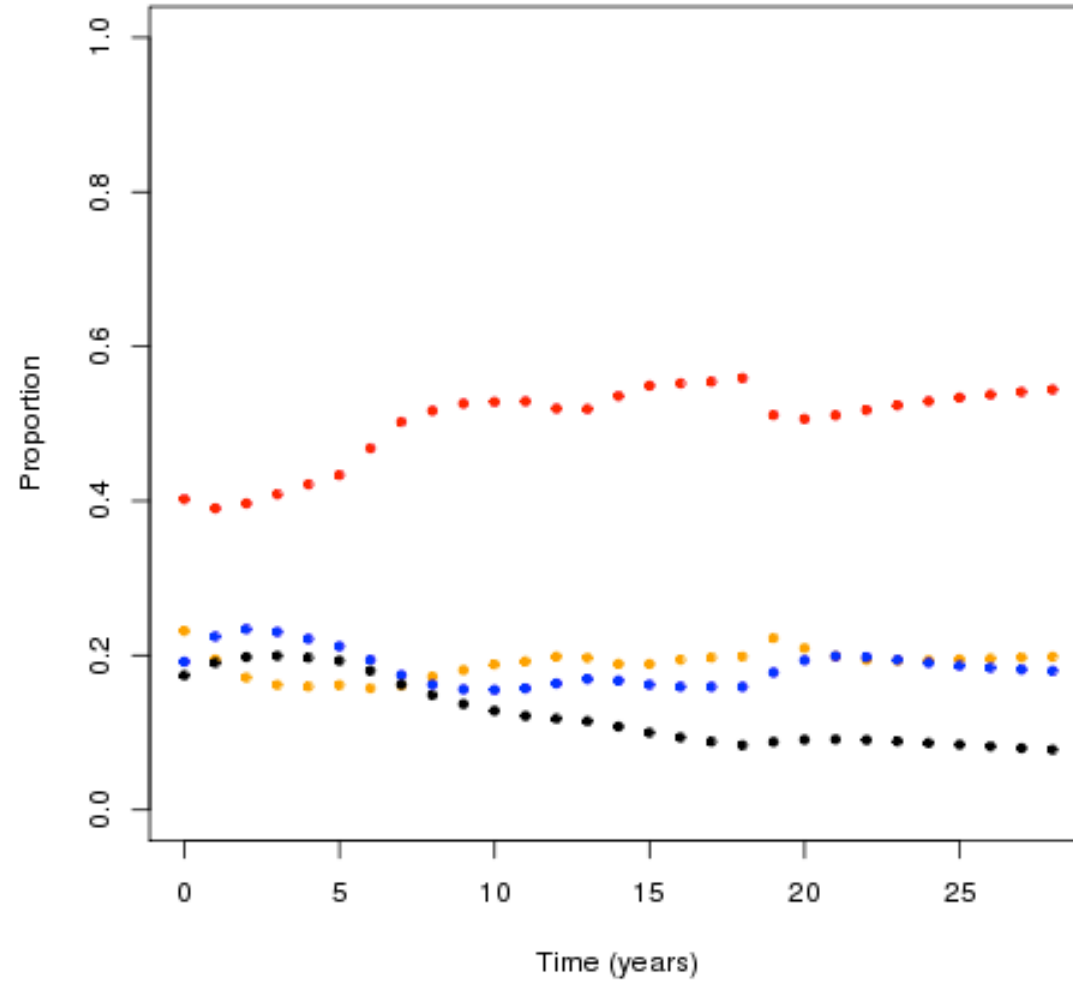
WashingtonDC



WashingtonDC



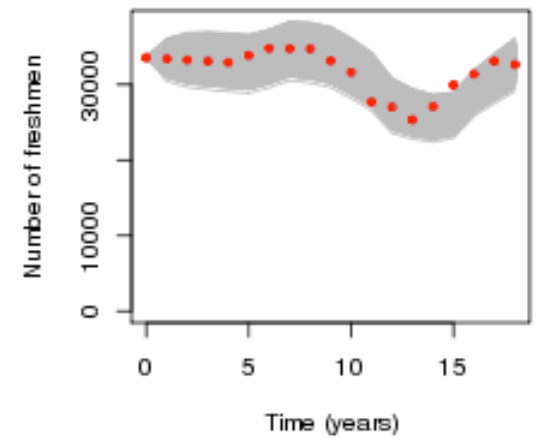
Washington D.C. Ten Year Forecast



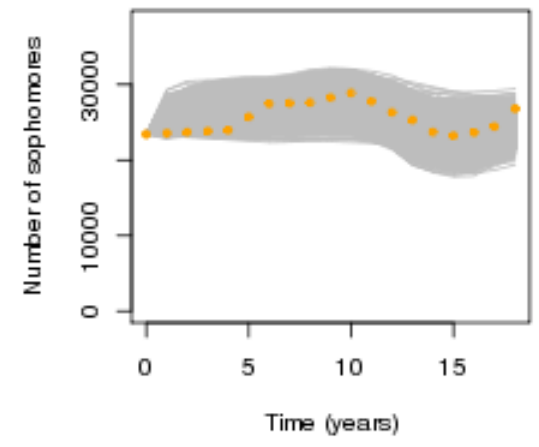
West Virginia

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.4436	0.2433	0.1076	0.3816	0.2471	0.7861	0.9147
<i>Standard Errors</i>	0.1367	0.1472	0.0936	0.1203	0.2266	0.1428	0.0982

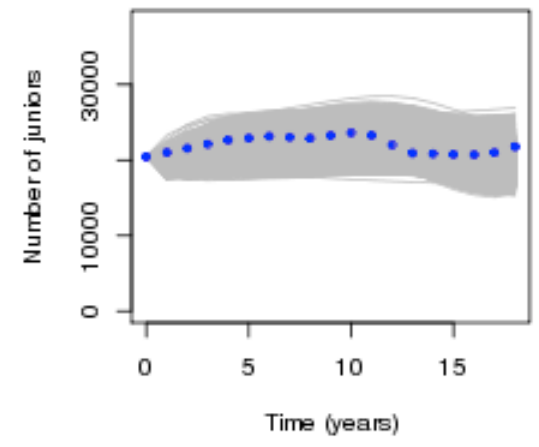
WestVirginia



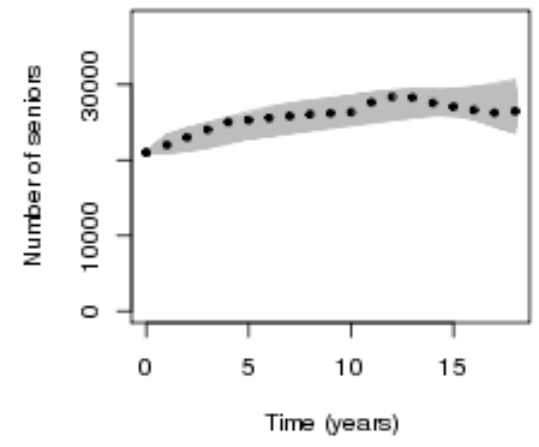
WestVirginia



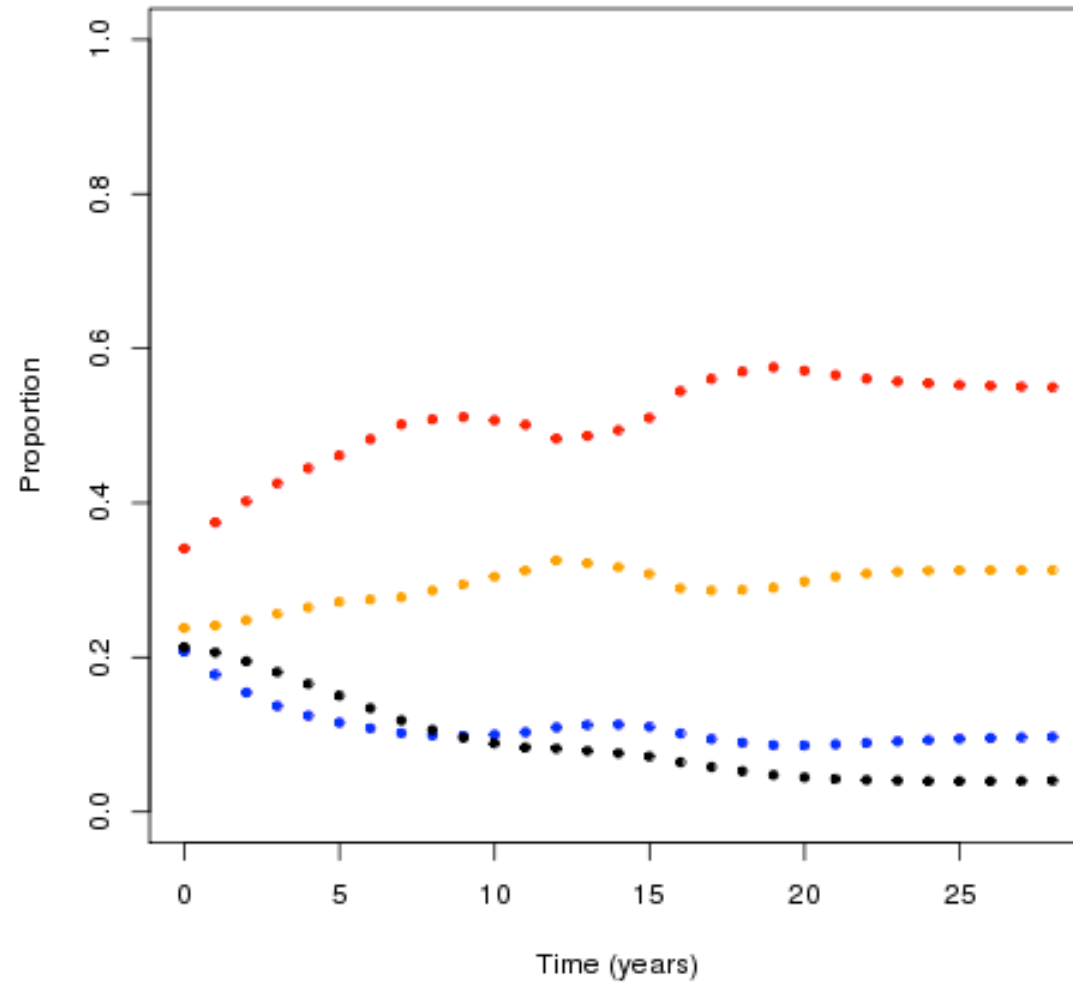
WestVirginia



WestVirginia



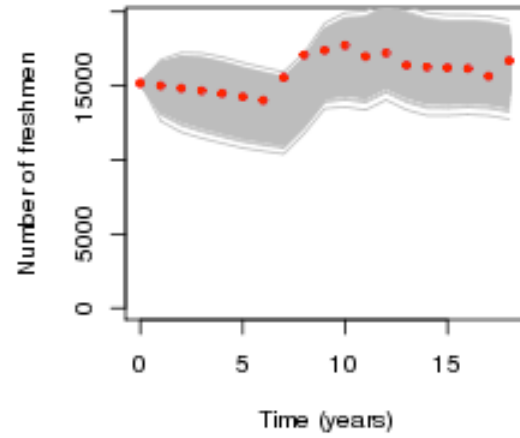
West Virginia Ten Year Forecast



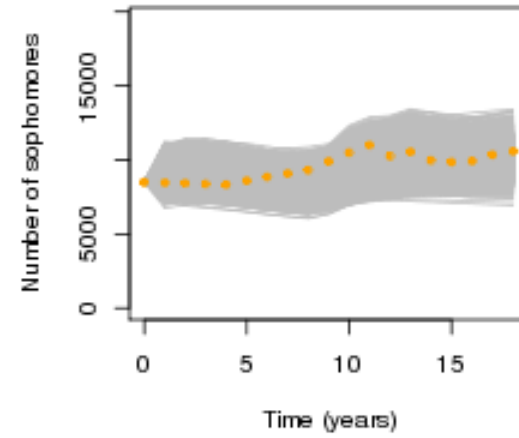
Wisconsin

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.3126	0.276	0.2466	0.3	0.6165	0.6638	0.8069
<i>Standard Errors</i>	0.1376	0.1246	0.0838	0.021	0.1732	0.1491	0.0734

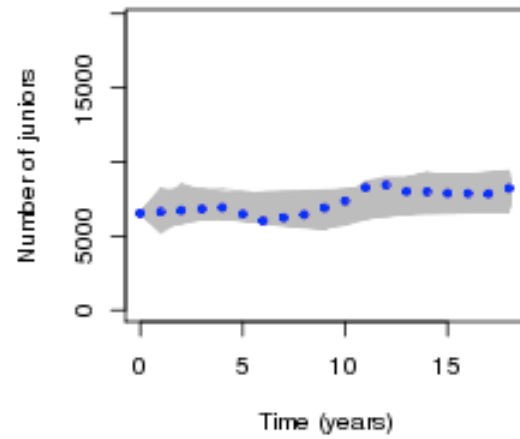
Wisconsin



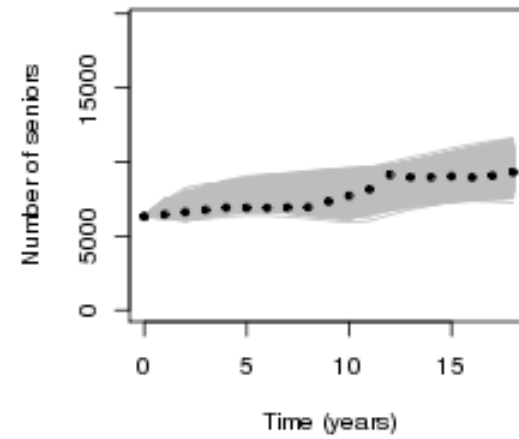
Wisconsin



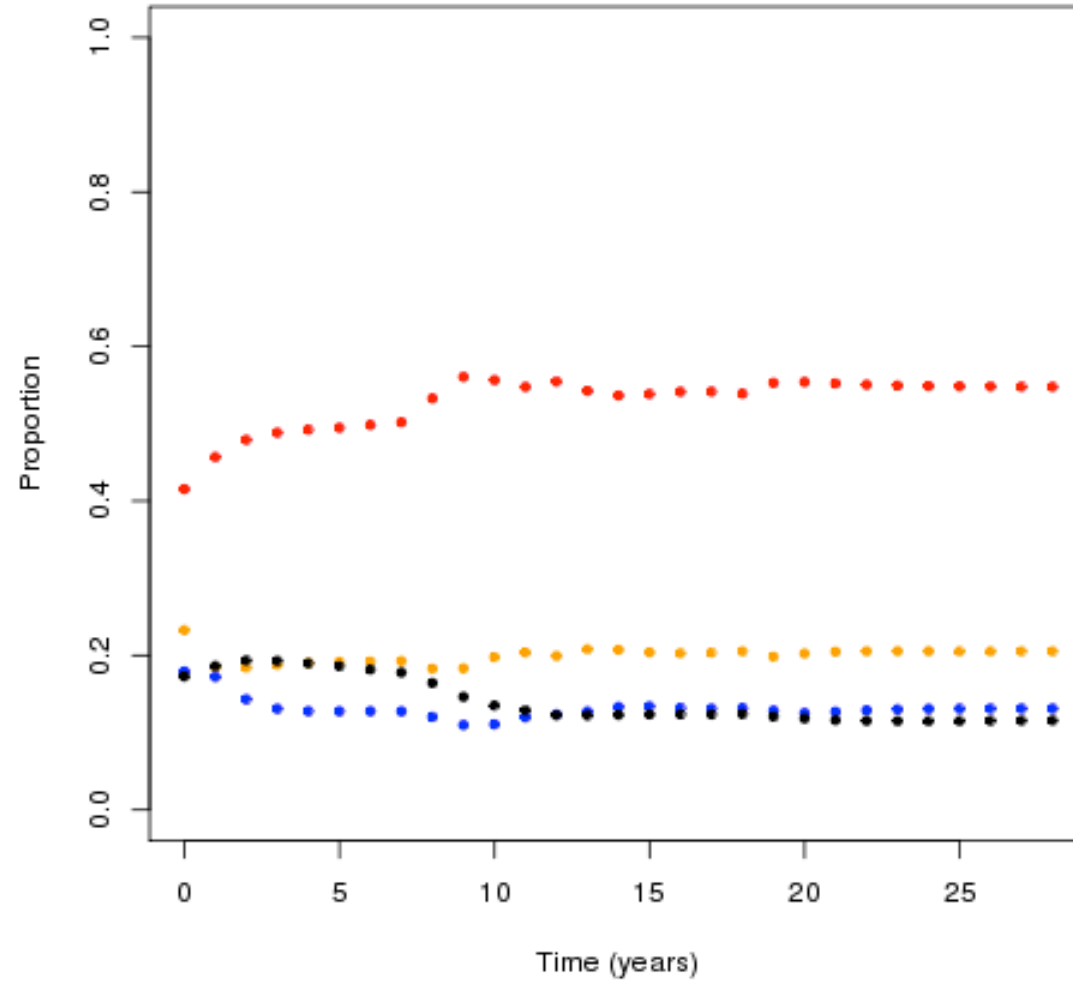
Wisconsin



Wisconsin



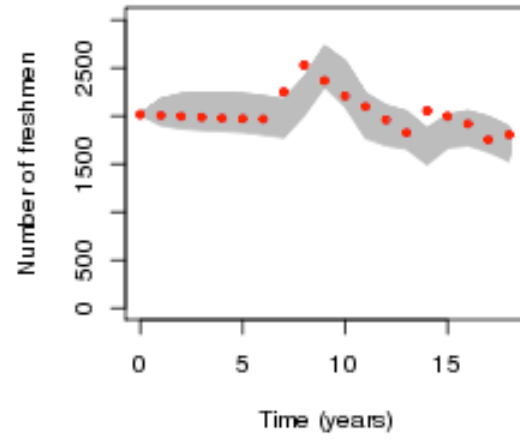
Wisconsin Ten Year Forecast



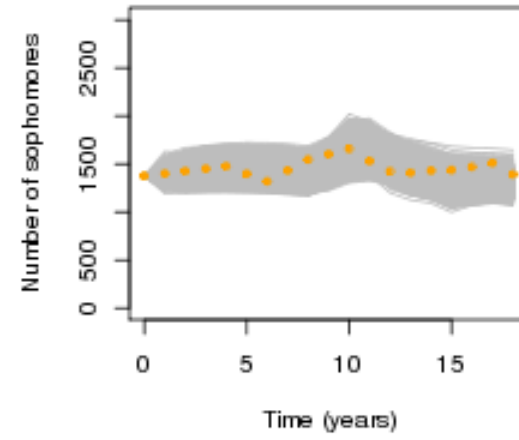
Wyoming

	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.4917	0.5403	0.1656	0.3769	0.182	0.3085	0.8722
<i>Standard Errors</i>	0.1508	0.245	0.1876	0.0311	0.2483	0.3177	0.1768

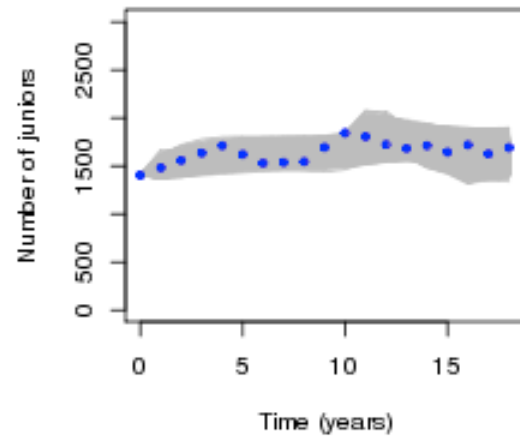
Wyoming



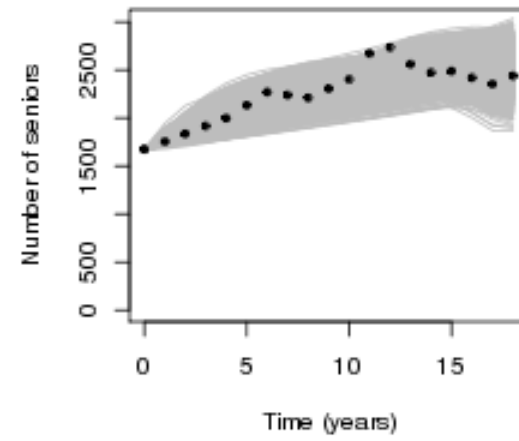
Wyoming



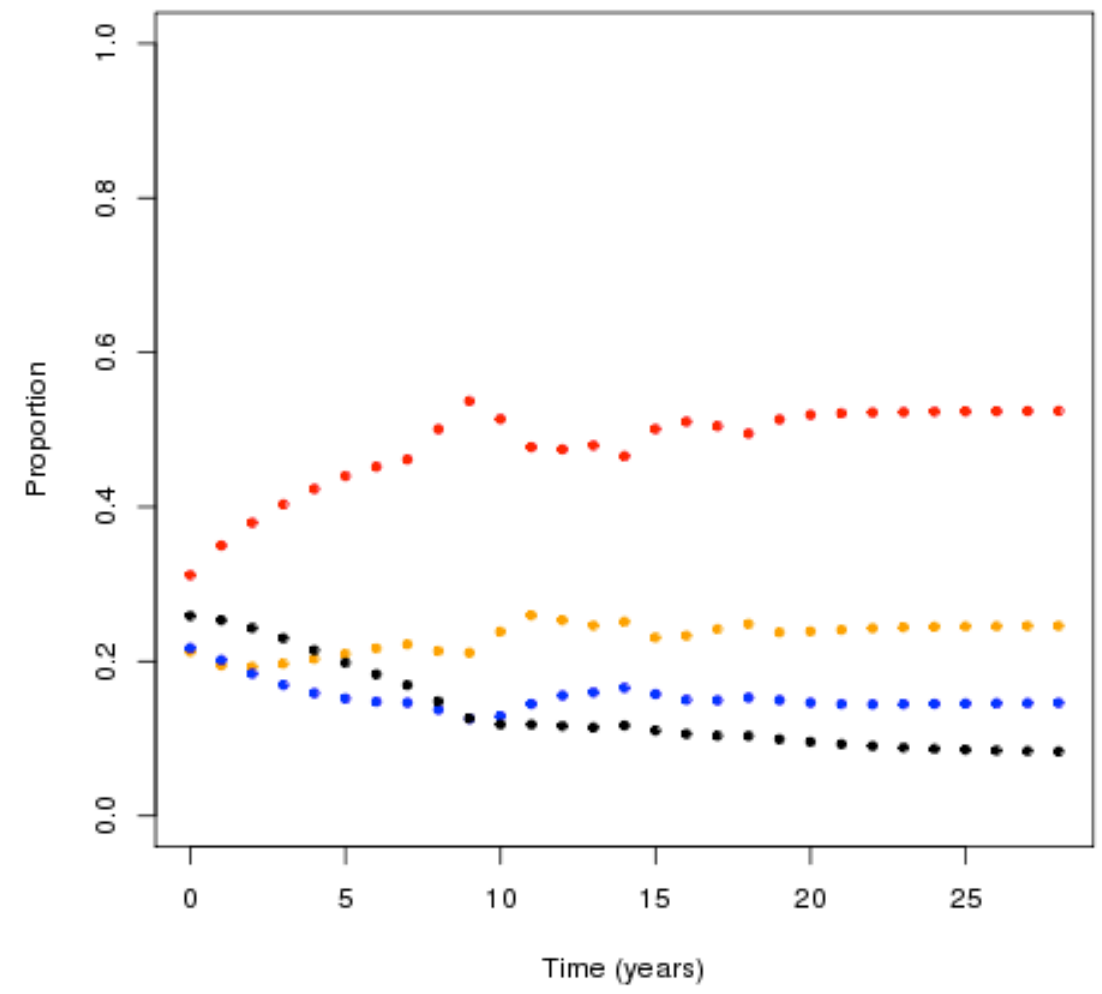
Wyoming



Wyoming



Wyoming Ten Year Forecast



	p12	p23	p34	p11	p22	p33	p44
<i>Means</i>	0.3611	0.4161	0.299	0.3285	0.4832	0.6391	0.8052
<i>Standard Errors</i>	0.1143	0.1273	0.1374	0.0185	0.1633	0.1143	0.1016

Alabama

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7242.0169	5792.5624	3683.0645
<i>Life expectancy</i>	5.8956	4.9948	4.5308	4.852
<i>Year death prob</i>	0.121	0.146	0.2519	0.2061
<i>Group death prob</i>	0.2758	0.2001	0.3642	1
<i>Avg yrs in group</i>	2.2784	1.3708	1.4458	4.852
<i># dying in group</i>	2757.9831	1449.4545	2109.4978	3683.0645
<i>Yrs lived in group</i>	22784.0655	9927.1157	8374.7542	17870.3814

Alaska

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	6466.6786	2092.0166	952.3607
<i>Life expectancy</i>	5.7246	6.1866	14.0208	18.5115
<i>Year death prob</i>	0.205	0.4098	0.0974	0.054
<i>Group death prob</i>	0.3533	0.6765	0.5448	1
<i>Avg yrs in group</i>	1.724	1.6508	5.5937	18.5115
<i># dying in group</i>	3533.3214	4374.662	1139.6559	952.3607
<i>Yrs lived in group</i>	17239.7606	10675.0301	11702.0543	17629.5924

Arizona

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	5149.7565	1843.7237	1496.2909
<i>Life expectancy</i>	4.8083	5.9245	11.5105	8.5361
<i>Year death prob</i>	0.276	0.356	0.0411	0.1172
<i>Group death prob</i>	0.485	0.642	0.1884	1
<i>Avg yrs in group</i>	1.7573	1.8035	4.583	8.5361
<i># dying in group</i>	4850.2435	3306.0328	347.4328	1496.2909
<i>Yrs lived in group</i>	17573.0815	9287.4925	8449.7025	12772.4168

Arkansas

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	6501.2956	4503.7631	3293.5487
<i>Life expectancy</i>	7.0347	8.6684	9.5458	7.974
<i>Year death prob</i>	0.2501	0.1495	0.0723	0.1254
<i>Group death prob</i>	0.3499	0.3073	0.2687	1
<i>Avg yrs in group</i>	1.3991	2.0556	3.7145	7.974
<i># dying in group</i>	3498.7044	1997.5325	1210.2144	3293.5487
<i>Yrs lived in group</i>	13991.3484	13363.8552	16729.0493	26262.8026

California

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7294.2127	4166.212	2574.61
<i>Life expectancy</i>	7.9191	8.6055	12.1402	11.5331
<i>Year death prob</i>	0.1648	0.2566	0.0762	0.0867
<i>Group death prob</i>	0.2706	0.4288	0.382	1
<i>Avg yrs in group</i>	1.642	1.6715	5.013	11.5331
<i># dying in group</i>	2705.7873	3128.0006	1591.602	2574.61
<i>Yrs lived in group</i>	16420.4812	12191.9712	20885.321	29693.3287

Colorado

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2484.9131	1636.1616	662.1416
<i>Life expectancy</i>	7.726	24.3679	28.6054	47.951
<i>Year death prob</i>	0.4498	0.0617	0.0647	0.0209
<i>Group death prob</i>	0.7515	0.3416	0.5953	1
<i>Avg yrs in group</i>	1.6708	5.533	9.2001	47.951
<i># dying in group</i>	7515.0869	848.7515	974.02	662.1416
<i>Yrs lived in group</i>	16707.6249	13748.9619	15052.769	31750.3308

Connecticut

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	5208.2982	4203.6012	2869.9406
<i>Life expectancy</i>	4.5483	5.7376	4.7631	3.4913
<i>Year death prob</i>	0.3072	0.1019	0.1333	0.2864
<i>Group death prob</i>	0.4792	0.1929	0.3173	1
<i>Avg yrs in group</i>	1.56	1.8934	2.3795	3.4913
<i># dying in group</i>	4791.7018	1004.6969	1333.6606	2869.9406
<i>Yrs lived in group</i>	15600.0675	9861.1431	10002.2677	10019.7198

Delaware

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	1877.6396	1232.3768	964.0486
<i>Life expectancy</i>	3.2127	7.1628	6.7032	5.2664
<i>Year death prob</i>	0.4349	0.1244	0.0843	0.1899
<i>Group death prob</i>	0.8122	0.3437	0.2177	1
<i>Avg yrs in group</i>	1.8678	2.7632	2.5835	5.2664
<i># dying in group</i>	8122.3604	645.2627	268.3282	964.0486
<i>Yrs lived in group</i>	18677.6386	5188.2961	3183.8271	5077.0636

Florida

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3857.7332	1829.708	1092.5689
<i>Life expectancy</i>	4.101	7.2534	9.6019	7.7754
<i>Year death prob</i>	0.4714	0.1948	0.0812	0.1286
<i>Group death prob</i>	0.6142	0.5257	0.4029	1
<i>Avg yrs in group</i>	1.3029	2.6993	4.9589	7.7754
<i># dying in group</i>	6142.2668	2028.0252	737.1391	1092.5689
<i>Yrs lived in group</i>	13028.6249	10413.0064	9073.3757	8495.2148

Georgia

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4762.3729	1637.0467	783.472
<i>Life expectancy</i>	8.2327	12.7888	23.7421	32.9521
<i>Year death prob</i>	0.2445	0.1418	0.0654	0.0303
<i>Group death prob</i>	0.5238	0.6563	0.5214	1
<i>Avg yrs in group</i>	2.1422	4.6276	7.9716	32.9521
<i># dying in group</i>	5237.6271	3125.3261	853.5747	783.472
<i>Yrs lived in group</i>	21422.0211	22038.3459	13049.8923	25817.0322

Hawaii

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7453.0481	4779.7536	3268.8996
<i>Life expectancy</i>	4.6135	3.848	3.8188	3.0985
<i>Year death prob</i>	0.1459	0.2564	0.186	0.3227
<i>Group death prob</i>	0.2547	0.3587	0.3161	1
<i>Avg yrs in group</i>	1.7455	1.399	1.6997	3.0985
<i># dying in group</i>	2546.9519	2673.2945	1510.854	3268.8996
<i>Yrs lived in group</i>	17455.1946	10426.6234	8124.2365	10128.6204

Idaho

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2203.4478	1512.7597	891.5085
<i>Life expectancy</i>	5.4855	18.375	19.1724	19.1465
<i>Year death prob</i>	0.5427	0.0601	0.0521	0.0522
<i>Group death prob</i>	0.7797	0.3135	0.4107	1
<i>Avg yrs in group</i>	1.4366	5.2123	7.8889	19.1465
<i># dying in group</i>	7796.5522	690.6882	621.2511	891.5085
<i>Yrs lived in group</i>	14366.1946	11485.0578	11933.993	17069.2972

Illinois

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	9016.0347	6209.941	2270.6874
<i>Life expectancy</i>	5.1053	4.0294	4.0846	5.8504
<i>Year death prob</i>	0.0668	0.2559	0.3261	0.1709
<i>Group death prob</i>	0.0984	0.3112	0.6343	1
<i>Avg yrs in group</i>	1.4724	1.216	1.9454	5.8504
<i># dying in group</i>	983.9653	2806.0937	3939.2536	2270.6874
<i>Yrs lived in group</i>	14724.2457	10963.8571	12080.8135	13284.4302

Indiana

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4130.0708	2742.1988	2032.8808
<i>Life expectancy</i>	7.7027	14.2225	15.3892	13.4926
<i>Year death prob</i>	0.321	0.0839	0.048	0.0741
<i>Group death prob</i>	0.587	0.336	0.2587	1
<i>Avg yrs in group</i>	1.8287	4.0047	5.3867	13.4926
<i># dying in group</i>	5869.9292	1387.872	709.318	2032.8808
<i>Yrs lived in group</i>	18287.1564	16539.7131	14771.3094	27428.9273

Iowa

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3895.1695	1547.7956	748.0797
<i>Life expectancy</i>	5.4172	10.0861	18.62	22.1401
<i>Year death prob</i>	0.4101	0.2243	0.0652	0.0452
<i>Group death prob</i>	0.6105	0.6026	0.5167	1
<i>Avg yrs in group</i>	1.4885	2.6872	7.9193	22.1401
<i># dying in group</i>	6104.8305	2347.3739	799.7159	748.0797
<i>Yrs lived in group</i>	14884.7259	10467.095	12257.5036	16562.5249

Kansas

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3701.1709	2406.9627	1744.5204
<i>Life expectancy</i>	4.7932	8.8449	8.4105	6.3938
<i>Year death prob</i>	0.4145	0.1036	0.0729	0.1564
<i>Group death prob</i>	0.6299	0.3497	0.2752	1
<i>Avg yrs in group</i>	1.5195	3.3754	3.7763	6.3938
<i># dying in group</i>	6298.8291	1294.2082	662.4423	1744.5204
<i>Yrs lived in group</i>	15195.122	12492.9072	9089.4833	11154.182

Kentucky

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3199.7668	1590.2717	882.8977
<i>Life expectancy</i>	5.5844	12.4227	17.9851	19.5624
<i>Year death prob</i>	0.4225	0.1444	0.0624	0.0511
<i>Group death prob</i>	0.68	0.503	0.4448	1
<i>Avg yrs in group</i>	1.6094	3.4842	7.1243	19.5624
<i># dying in group</i>	6800.2332	1609.4951	707.374	882.8977
<i>Yrs lived in group</i>	16093.833	11148.5933	11329.5239	17271.5929

Louisiana

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2321.0693	1599.8875	1262.0454
<i>Life expectancy</i>	5.6465	17.3501	18.1465	14.858
<i>Year death prob</i>	0.4742	0.0642	0.0329	0.0673
<i>Group death prob</i>	0.7679	0.3107	0.2112	1
<i>Avg yrs in group</i>	1.6194	4.8419	6.426	14.858
<i># dying in group</i>	7678.9307	721.1818	337.8421	1262.0454
<i>Yrs lived in group</i>	16194.0036	11238.4581	10280.8263	18751.4851

Maine

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	667.0085	474.7905	369.6594
<i>Life expectancy</i>	130.9883	1937.753	2700.6921	3441.0831
<i>Year death prob</i>	0.5368	0.0188	0.0103	3e-04
<i>Group death prob</i>	0.9333	0.2882	0.2214	1
<i>Avg yrs in group</i>	1.7385	15.3442	21.555	3441.0831
<i># dying in group</i>	9332.9915	192.218	105.1311	369.6594
<i>Yrs lived in group</i>	17385.1757	10234.6792	10234.1275	1272028.8636

Maryland

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3063.1786	2003.371	1025.6871
<i>Life expectancy</i>	4.0336	8.9897	8.6883	7.7735
<i>Year death prob</i>	0.542	0.1046	0.1036	0.1286
<i>Group death prob</i>	0.6937	0.346	0.488	1
<i>Avg yrs in group</i>	1.2799	3.3074	4.7084	7.7735
<i># dying in group</i>	6936.8214	1059.8075	977.684	1025.6871
<i>Yrs lived in group</i>	12798.6432	10131.0948	9432.7607	7973.1423

Massachusetts

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	1118.4321	539.0025	390.3822
<i>Life expectancy</i>	13.6067	107.6678	199.8502	231.1828
<i>Year death prob</i>	0.5676	0.0456	0.0085	0.0043
<i>Group death prob</i>	0.8882	0.5181	0.2757	1
<i>Avg yrs in group</i>	1.5648	11.3546	32.4119	231.1828
<i># dying in group</i>	8881.5679	579.4296	148.6203	390.3822
<i>Yrs lived in group</i>	15647.6298	12699.3927	17470.0878	90249.6749

Michigan

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2128.5265	1252.557	616.7719
<i>Life expectancy</i>	3.951	11.7148	12.3913	13.4043
<i>Year death prob</i>	0.5401	0.093	0.0877	0.0746
<i>Group death prob</i>	0.7871	0.4115	0.5076	1
<i>Avg yrs in group</i>	1.4575	4.423	5.7909	13.4043
<i># dying in group</i>	7871.4735	875.9695	635.7851	616.7719
<i>Yrs lived in group</i>	14574.621	9414.5477	7253.3793	8267.4098

Minnesota

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4214.4644	1510.7812	659.8878
<i>Life expectancy</i>	5.069	8.6906	16.9022	21.6438
<i>Year death prob</i>	0.4114	0.2438	0.0756	0.0462
<i>Group death prob</i>	0.5786	0.6415	0.5632	1
<i>Avg yrs in group</i>	1.4063	2.6316	7.4485	21.6438
<i># dying in group</i>	5785.5356	2703.6832	850.8934	659.8878
<i>Yrs lived in group</i>	14063.3657	11090.8326	11253.0323	14282.4523

Mississippi

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3237.4936	1753.4289	1321.8084
<i>Life expectancy</i>	5.2521	10.9167	13.5499	9.9774
<i>Year death prob</i>	0.3937	0.1281	0.0408	0.1002
<i>Group death prob</i>	0.6763	0.4584	0.2462	1
<i>Avg yrs in group</i>	1.7179	3.578	6.0285	9.9774
<i># dying in group</i>	6762.5064	1484.0647	431.6205	1321.8084
<i>Yrs lived in group</i>	17178.6325	11583.8127	10570.6216	13188.1796

Montana

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	1843.6398	750.2522	415.5813
<i>Life expectancy</i>	5.0095	19.0988	34.2869	39.7467
<i>Year death prob</i>	0.548	0.1152	0.0364	0.0252
<i>Group death prob</i>	0.8156	0.5931	0.4461	1
<i>Avg yrs in group</i>	1.4884	5.146	12.2703	39.7467
<i># dying in group</i>	8156.3602	1093.3877	334.6709	415.5813
<i>Yrs lived in group</i>	14883.7367	9487.4019	9205.8503	16517.9919

Nebraska

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4495.4387	3269.4795	1957.0928
<i>Life expectancy</i>	5.6612	9.3454	9.6177	9.1292
<i>Year death prob</i>	0.377	0.116	0.0967	0.1095
<i>Group death prob</i>	0.5505	0.2727	0.4014	1
<i>Avg yrs in group</i>	1.46	2.3506	4.153	9.1292
<i># dying in group</i>	5504.5613	1225.9592	1312.3867	1957.0928
<i>Yrs lived in group</i>	14600.1416	10566.8012	13578.2664	17866.735

Nevada

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4675.294	1280.8788	758.61
<i>Life expectancy</i>	5.6018	8.2064	22.4451	23.7504
<i>Year death prob</i>	0.3017	0.3529	0.0487	0.0421
<i>Group death prob</i>	0.5325	0.726	0.4077	1
<i>Avg yrs in group</i>	1.7651	2.0572	8.3788	23.7504
<i># dying in group</i>	5324.706	3394.4152	522.2688	758.61
<i>Yrs lived in group</i>	17650.5483	9617.9636	10732.2162	18017.2912

New Hampshire

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3683.1659	2379.3544	1401.5008
<i>Life expectancy</i>	5.4525	10.9412	11.8941	11.5025
<i>Year death prob</i>	0.444	0.1087	0.0803	0.0869
<i>Group death prob</i>	0.6317	0.354	0.411	1
<i>Avg yrs in group</i>	1.4227	3.2575	5.1188	11.5025
<i># dying in group</i>	6316.8341	1303.8115	977.8536	1401.5008
<i>Yrs lived in group</i>	14227.2913	11997.7734	12179.5347	16120.8075

New Jersey

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	1947.2226	935.6084	640.4644
<i>Life expectancy</i>	4.8915	17.85	24.2871	22.7802
<i>Year death prob</i>	0.5688	0.0841	0.0363	0.0439
<i>Group death prob</i>	0.8053	0.5195	0.3155	1
<i>Avg yrs in group</i>	1.4157	6.1805	8.693	22.7802
<i># dying in group</i>	8052.7774	1011.6142	295.144	640.4644
<i>Yrs lived in group</i>	14157.0438	12034.8274	8133.2753	14589.893

New Mexico

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3360.9893	2133.2998	1185.4288
<i>Life expectancy</i>	4.9772	10.2826	11.3558	11.2985
<i>Year death prob</i>	0.4364	0.1188	0.0875	0.0885
<i>Group death prob</i>	0.6639	0.3653	0.4443	1
<i>Avg yrs in group</i>	1.5212	3.0748	5.0774	11.2985
<i># dying in group</i>	6639.0107	1227.6895	947.871	1185.4288
<i>Yrs lived in group</i>	15212.3405	10334.4145	10831.6738	13393.6095

New York

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4442.03	2632.5294	1803.9661
<i>Life expectancy</i>	4.6531	7.4724	8.6459	7.0667
<i>Year death prob</i>	0.4167	0.1735	0.0828	0.1415
<i>Group death prob</i>	0.5558	0.4074	0.3147	1
<i>Avg yrs in group</i>	1.3339	2.3484	3.8034	7.0667
<i># dying in group</i>	5557.97	1809.5006	828.5633	1803.9661
<i>Yrs lived in group</i>	13338.9361	10431.8821	10012.4651	12748.119

North Carolina

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	1773.8966	990.7703	480.7489
<i>Life expectancy</i>	6.2216	26.8449	34.5108	40.3587
<i>Year death prob</i>	0.5636	0.0583	0.0345	0.0248
<i>Group death prob</i>	0.8226	0.4415	0.5148	1
<i>Avg yrs in group</i>	1.4596	7.5697	14.9276	40.3587
<i># dying in group</i>	8226.1034	783.1262	510.0214	480.7489
<i>Yrs lived in group</i>	14596.1877	13427.9187	14789.822	19402.4078

North Dakota

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3203.0138	2474.1044	1970.2429
<i>Life expectancy</i>	6.5963	15.0843	13.062	10.4517
<i>Year death prob</i>	0.3851	0.0456	0.043	0.0957
<i>Group death prob</i>	0.6797	0.2276	0.2037	1
<i>Avg yrs in group</i>	1.7648	4.9948	4.7389	10.4517
<i># dying in group</i>	6796.9862	728.9094	503.8615	1970.2429
<i>Yrs lived in group</i>	17647.7913	15998.3792	11724.514	20592.3172

Ohio

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7108.2389	2148.316	1268.5411
<i>Life expectancy</i>	7.6068	8.2757	22.1379	28.254
<i>Year death prob</i>	0.1677	0.4402	0.0751	0.0354
<i>Group death prob</i>	0.2892	0.6978	0.4095	1
<i>Avg yrs in group</i>	1.7242	1.585	5.4545	28.254
<i># dying in group</i>	2891.7611	4959.9229	879.7749	1268.5411
<i>Yrs lived in group</i>	17242.3786	11266.6684	11717.8968	35841.4054

Oklahoma

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2278.1199	807.5047	480.1158
<i>Life expectancy</i>	5.3465	16.1519	30.8427	29.6331
<i>Year death prob</i>	0.4632	0.1237	0.0307	0.0337
<i>Group death prob</i>	0.7722	0.6455	0.4054	1
<i>Avg yrs in group</i>	1.6669	5.2193	13.2239	29.6331
<i># dying in group</i>	7721.8801	1470.6152	327.389	480.1158
<i>Yrs lived in group</i>	16669.3286	11890.2505	10678.3308	14227.307

Oregon

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3296.8211	1867.8336	1109.6838
<i>Life expectancy</i>	4.5432	8.7042	9.7877	9.1274
<i>Year death prob</i>	0.4005	0.1372	0.093	0.1096
<i>Group death prob</i>	0.6703	0.4334	0.4059	1
<i>Avg yrs in group</i>	1.6736	3.159	4.3651	9.1274
<i># dying in group</i>	6703.1789	1428.9875	758.1498	1109.6838
<i>Yrs lived in group</i>	16735.7666	10414.5165	8153.3346	10128.4835

Pennsylvania

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2580.7136	792.9312	375.1889
<i>Life expectancy</i>	11.9303	39.6737	114.8713	212.7444
<i>Year death prob</i>	0.4386	0.1582	0.0371	0.0047
<i>Group death prob</i>	0.7419	0.6927	0.5268	1
<i>Avg yrs in group</i>	1.6916	4.3792	14.2076	212.7444
<i># dying in group</i>	7419.2864	1787.7824	417.7423	375.1889
<i>Yrs lived in group</i>	16916.2426	11301.4118	11265.6525	79819.3459

Rhode Island

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	1673.3668	1097.8731	901.9369
<i>Life expectancy</i>	5.0904	21.9118	23.857	15.4517
<i>Year death prob</i>	0.5848	0.0549	0.016	0.0647
<i>Group death prob</i>	0.8327	0.3439	0.1785	1
<i>Avg yrs in group</i>	1.4238	6.2596	11.1629	15.4517
<i># dying in group</i>	8326.6332	575.4937	195.9361	901.9369
<i>Yrs lived in group</i>	14237.5347	10474.5478	12255.4907	13936.4433

South Carolina

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	3279.871	1445.6134	857.9549
<i>Life expectancy</i>	5.2052	10.8851	16.3811	15.2274
<i>Year death prob</i>	0.411	0.1526	0.0554	0.0657
<i>Group death prob</i>	0.672	0.5592	0.4065	1
<i>Avg yrs in group</i>	1.635	3.6651	7.3438	15.2274
<i># dying in group</i>	6720.129	1834.2576	587.6585	857.9549
<i>Yrs lived in group</i>	16349.9424	12021.0775	10616.2758	13064.4597

South Dakota

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7875.65	6236.2947	4458.8295
<i>Life expectancy</i>	4.5485	4.1661	3.4569	2.392
<i>Year death prob</i>	0.1676	0.1457	0.1632	0.4181
<i>Group death prob</i>	0.2124	0.2082	0.285	1
<i>Avg yrs in group</i>	1.2674	1.4288	1.7467	2.392
<i># dying in group</i>	2124.35	1639.3553	1777.4652	4458.8295
<i>Yrs lived in group</i>	12673.5394	11252.5835	10892.9985	10665.4556

Tennessee

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2895.517	1901.085	1310.0273
<i>Life expectancy</i>	5.3231	13.1017	14.0874	11.9897
<i>Year death prob</i>	0.4645	0.0891	0.0534	0.0834
<i>Group death prob</i>	0.7104	0.3434	0.3109	1
<i>Avg yrs in group</i>	1.5295	3.8525	5.8254	11.9897
<i># dying in group</i>	7104.483	994.432	591.0577	1310.0273
<i>Yrs lived in group</i>	15295.0904	11154.8876	11074.5224	15706.8836

Texas

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7350.9144	4398.0631	2700.8121
<i>Life expectancy</i>	4.4473	3.8722	4.2294	3.7244
<i>Year death prob</i>	0.1655	0.2994	0.1987	0.2685
<i>Group death prob</i>	0.2649	0.4017	0.3859	1
<i>Avg yrs in group</i>	1.6009	1.3417	1.9423	3.7244
<i># dying in group</i>	2649.0856	2952.8513	1697.251	2700.8121
<i>Yrs lived in group</i>	16008.9656	9862.7198	8542.4114	10058.8732

Utah

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2279.6809	1715.603	1352.3581
<i>Life expectancy</i>	6.2476	19.9542	19.4193	16.1338
<i>Year death prob</i>	0.4545	0.0463	0.0316	0.062
<i>Group death prob</i>	0.772	0.2474	0.2117	1
<i>Avg yrs in group</i>	1.6987	5.34	6.7015	16.1338
<i># dying in group</i>	7720.3191	564.0779	363.245	1352.3581
<i>Yrs lived in group</i>	16986.7922	12173.4417	11497.1681	21818.62

Vermont

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2529.7668	1109.4351	626.2135
<i>Life expectancy</i>	8.0882	25.4494	47.7641	62.7322
<i>Year death prob</i>	0.4527	0.1247	0.0353	0.0159
<i>Group death prob</i>	0.747	0.5614	0.4356	1
<i>Avg yrs in group</i>	1.6501	4.5023	12.3554	62.7322
<i># dying in group</i>	7470.2332	1420.3317	483.2216	626.2135
<i>Yrs lived in group</i>	16500.6153	11389.7418	13707.4728	39283.7514

Virginia

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2891.367	1895.9432	1057.2589
<i>Life expectancy</i>	7.339	18.9917	22.3404	27.3002
<i>Year death prob</i>	0.3847	0.0793	0.0622	0.0366
<i>Group death prob</i>	0.7109	0.3443	0.4424	1
<i>Avg yrs in group</i>	1.8478	4.3426	7.1167	27.3002
<i># dying in group</i>	7108.633	995.4238	838.6843	1057.2589
<i>Yrs lived in group</i>	18478.2469	12555.9364	13492.7766	28863.3623

Washington

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	9340.0455	7247.703	1771.9792
<i>Life expectancy</i>	4.821	3.6987	3.1902	6.7879
<i>Year death prob</i>	0.0483	0.1831	0.4936	0.1473
<i>Group death prob</i>	0.066	0.224	0.7555	1
<i>Avg yrs in group</i>	1.3663	1.2232	1.5307	6.7879
<i># dying in group</i>	659.9545	2092.3425	5475.7238	1771.9792
<i>Yrs lived in group</i>	13663.0686	11424.7075	11093.8222	12027.9602

Washington D.C.

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	2297.7355	525.5216	373.7276
<i>Life expectancy</i>	4.1947	11.82	33.156	24.6761
<i>Year death prob</i>	0.5209	0.182	0.0185	0.0405
<i>Group death prob</i>	0.7702	0.7713	0.2888	1
<i>Avg yrs in group</i>	1.4787	4.2368	15.6075	24.6761
<i># dying in group</i>	7702.2645	1772.2139	151.794	373.7276
<i>Yrs lived in group</i>	14787.4479	9735.0594	8202.0811	9222.1245

West Virginia

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7173.2746	2318.3568	1166.0291
<i>Life expectancy</i>	5.0207	4.7447	10.571	11.7242
<i>Year death prob</i>	0.1748	0.5096	0.1063	0.0853
<i>Group death prob</i>	0.2827	0.6768	0.497	1
<i>Avg yrs in group</i>	1.6172	1.3282	4.6743	11.7242
<i># dying in group</i>	2826.7254	4854.9178	1152.3277	1166.0291
<i>Yrs lived in group</i>	16171.9607	9527.5932	10836.6234	13670.7532

Wisconsin

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	4464.98	3213.4067	2356.5347
<i>Life expectancy</i>	4.7689	7.4812	6.7717	5.1784
<i>Year death prob</i>	0.3875	0.1075	0.0897	0.1931
<i>Group death prob</i>	0.5535	0.2803	0.2667	1
<i>Avg yrs in group</i>	1.4285	2.6077	2.9741	5.1784
<i># dying in group</i>	5535.02	1251.5733	856.872	2356.5347
<i>Yrs lived in group</i>	14285.423	11643.3833	9556.9661	12203.1534

Wyoming

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	7890.1982	5211.3753	1247.7434
<i>Life expectancy</i>	4.2993	3.415	3.3196	7.8244
<i>Year death prob</i>	0.1315	0.2777	0.5259	0.1278
<i>Group death prob</i>	0.211	0.3395	0.7606	1
<i>Avg yrs in group</i>	1.6048	1.2225	1.4462	7.8244
<i># dying in group</i>	2109.8018	2678.8229	3963.632	1247.7434
<i>Yrs lived in group</i>	16047.6495	9645.7838	7536.7314	9762.8113

	Year 1	Year 2	Year 3	Year 4+
<i># living in group</i>	10000	5376.8127	4328.9006	3585.9577
<i>Life expectancy</i>	5.5699	7.5895	7.0232	5.1336
<i>Year death prob</i>	0.3104	0.1007	0.0619	0.1948
<i>Group death prob</i>	0.4623	0.1949	0.1716	1
<i>Avg yrs in group</i>	1.4892	1.9351	2.7706	5.1336
<i># dying in group</i>	4623.1873	1047.9121	742.9429	3585.9577
<i>Yrs lived in group</i>	14891.9383	10404.5969	11993.8463	18408.7078