BIOL806_results/figures

Data Organizing and Cleaning

All codes to creating the tables, figures and data frames can be found here https://github.com/1006kay/Biol_806_FinalProject.git on github.

Above and Below Groups from Mean Rumination Time (RT) in the Last Week of Pregnancy

Table 1: This table shows the distribution of cows that belong in the below group based off of their rumination time (RT) in their last week of pregnancy. The primiparous cows (n=5) were grouped together to find the primiparous mean RT (4.89.99 min/24hr) and the multiparous cows (n=29) were grouped together to find the multiparous mean RT (473.12 min/24hr).

Cow ID	Lactation	meanRT-1wk	mean_grp1avg_rt24	comparison	parity
1250	1	444.1329	489.9999	below	primi
1246	1	474.5828	489.9999	below	primi
1245	1	466.3435	489.9999	below	primi
1215	2	452.2185	473.1203	below	multi
1208	2	444.5366	473.1203	below	multi
1199	2	414.9472	473.1203	below	multi
1195	2	397.0047	473.1203	below	multi
1193	2	466.6102	473.1203	below	multi
1191	2	316.7326	473.1203	below	multi
1157	3	462.7568	473.1203	below	multi
1150	3	446.1355	473.1203	below	multi
1143	3	456.3694	473.1203	below	multi
1065	4	445.1048	473.1203	below	multi
1048	5	441.6824	473.1203	below	multi
963	7	455.0059	473.1203	below	multi

Cow ID	Lactation	meanRT-1wk	mean_grp1avg_rt24	comparison	parity
953	7	433.9651	473.1203	below	multi

Table 2: This table shows the distribution of cows that belong in the above group based off of their rumination time (RT) in their last week of pregnancy. The primiparous cows (n=5) were grouped together to find the primiparous mean RT (4.89.99 min/24hr) and the multiparous cows (n=29) were grouped together to find the multiparous mean RT (473.12 min/24hr).

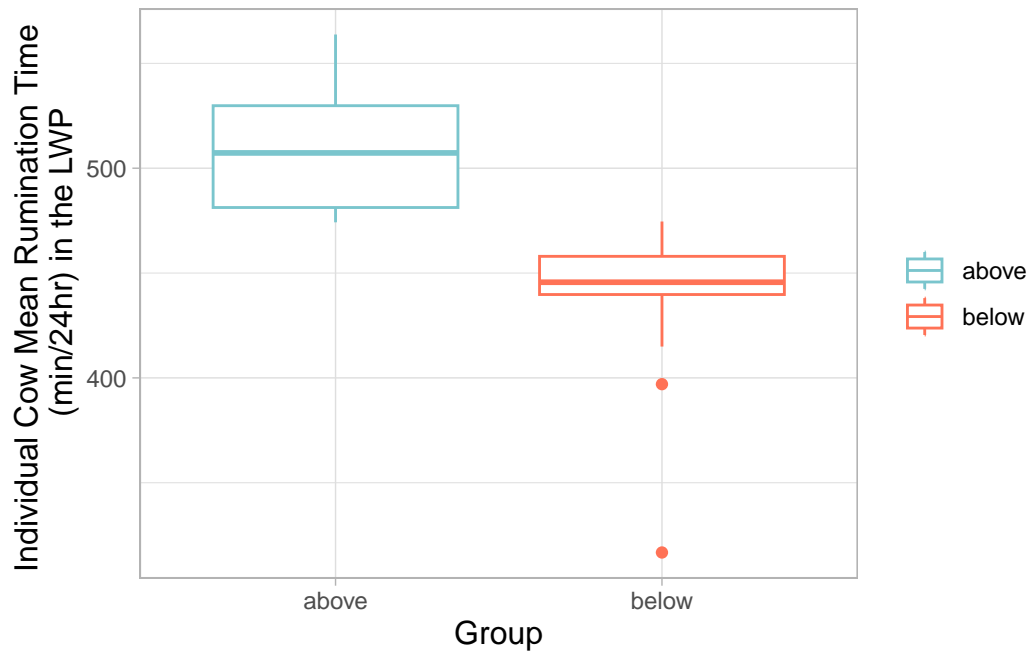| Cow ID	Lactation	meanRT-1wk	mean_grp1avg_rt24	comparison	parity
1253	1	549.8919	489.9999	above	primi
1252	1	515.0486	489.9999	above	primi
1209	2	536.9909	473.1203	above	multi
1207	2	481.2637	473.1203	above	multi
1206	2	532.1750	473.1203	above	multi
1205	2	478.9041	473.1203	above	multi
1203	2	481.2478	473.1203	above	multi
1200	2	522.5576	473.1203	above	multi
1192	2	522.7118	473.1203	above	multi
1189	2	499.5291	473.1203	above	multi
1148	3	489.7752	473.1203	above	multi
1141	3	563.7630	473.1203	above	multi
1107	4	519.2403	473.1203	above	multi
1103	4	494.5288	473.1203	above	multi
1083	4	537.4015	473.1203	above	multi
1047	5	478.9204	473.1203	above	multi
989	6	474.2016	473.1203	above	multi
976	6	474.2066	473.1203	above	multi

Figure 1: The box plot figure above shows the individual cow mean rumination time (min/24hr) in the last week of pregnancy (LWP) for both the above and below groups.

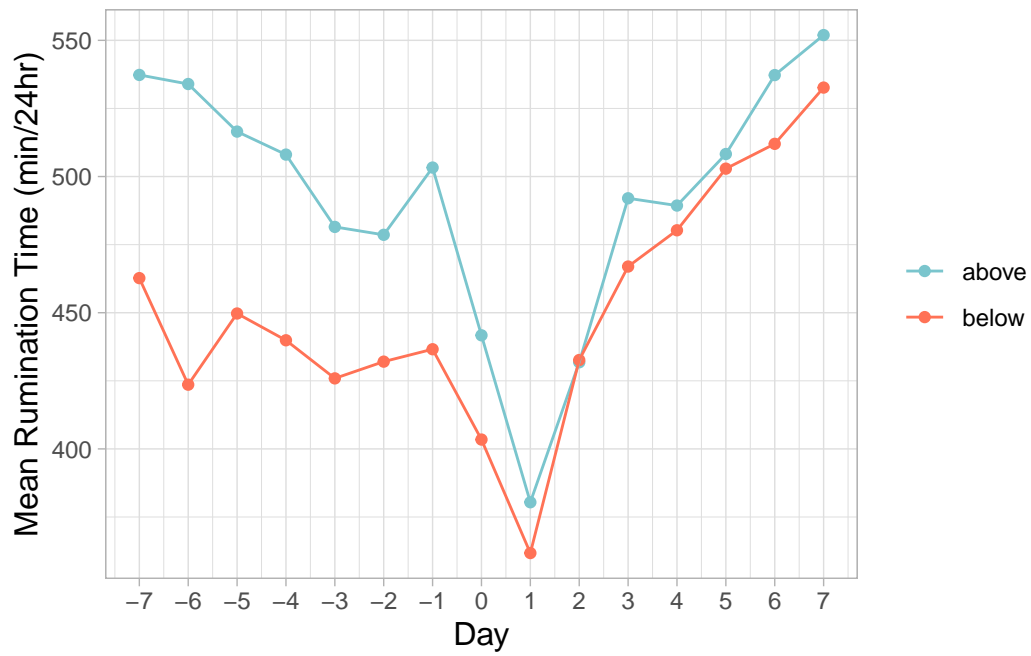**Mean RT in the Week Before and Week After Calving**

Figure 2: This time series plot is showing the mean rumination (RT) (min/24hr) from the above and below group from 7 days before and 7 days after relative to calving (day 0).

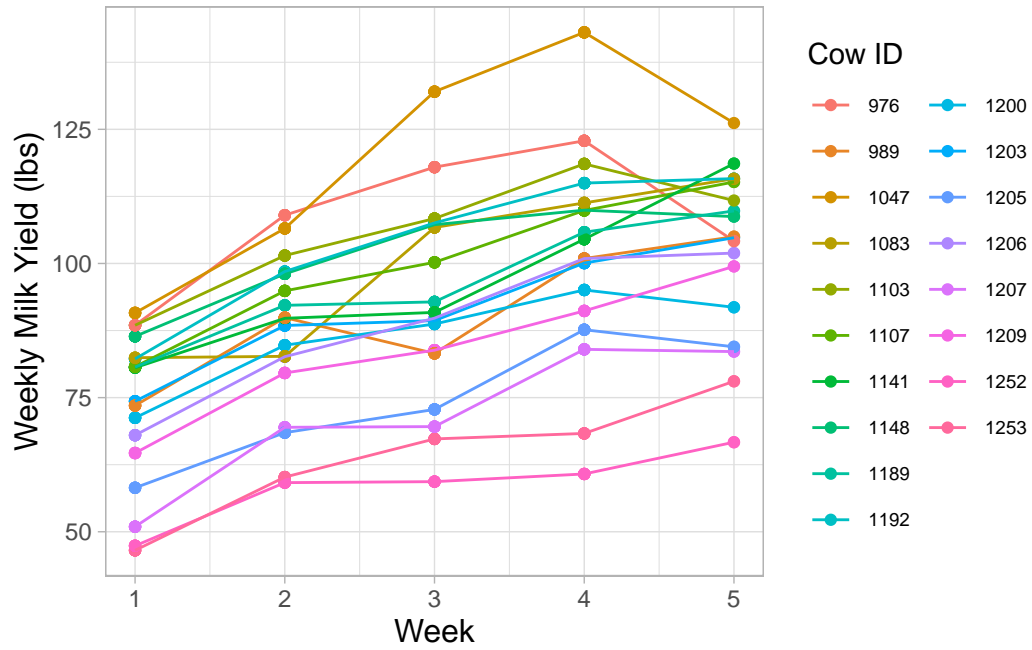**Above and Below Groups Milk Yield (MY) in first 30 days in milk (DIM)**

Figure 3: This time series plot shows the mean weekly milk yield (lbs) for each individual cow (primi- and multiparous) in the above group in the first five weeks into lactation. Calving is at the beginning of week 1.
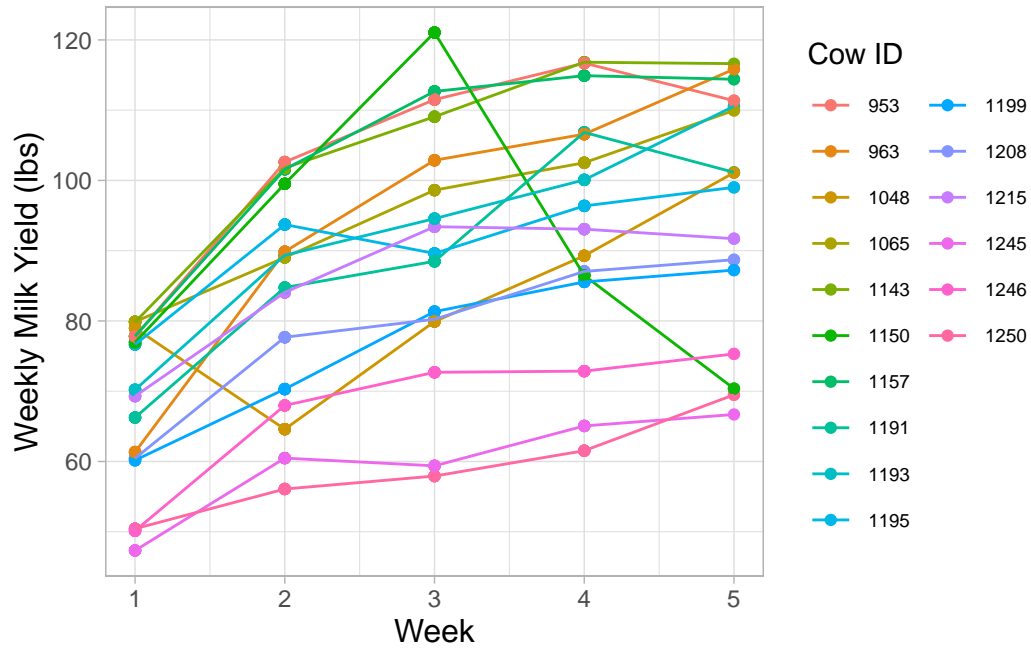
Figure 4: This time series plot shows the mean weekly milk yield (lbs) for each individual cow (primi- and multiparous) in the below group in the first five weeks into lactation. Calving is at the beginning of week 1.
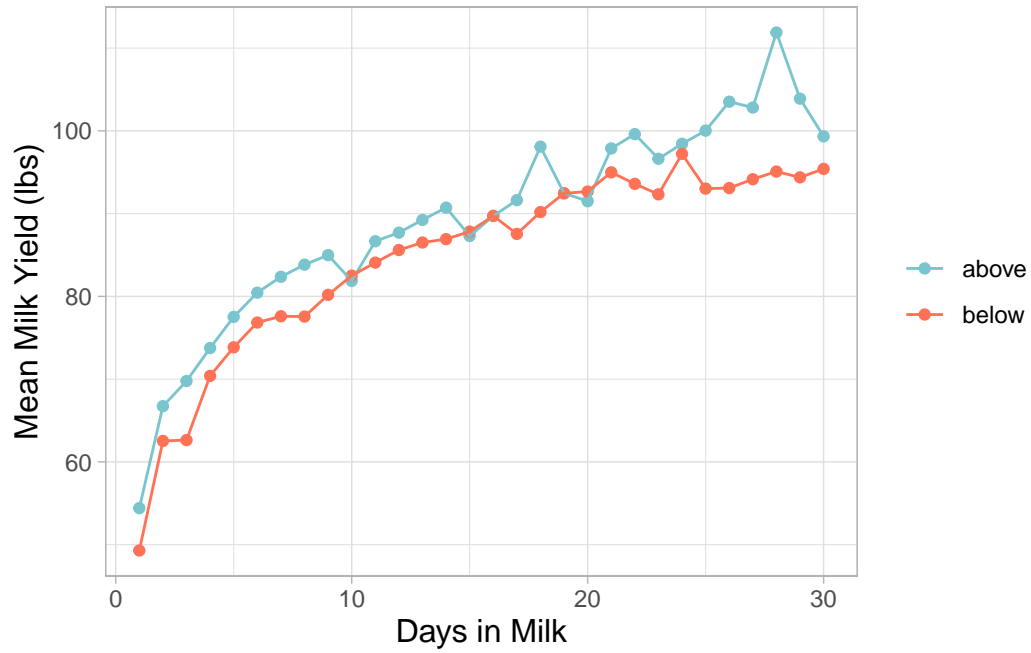
Figure 5: In this time series plot, it shows the mean milk yield (lbs) for the above and below groups (primi- and multiparous cows) in the first 30 days in milk (DIM). Calving is at day 0.