


```
set(gca,'XLim',[50 500]); % set x-axis limits
title('adult females');
```

% Next, plot the fundamental frequencies for **boys** and **girls** (separately)

(6) Repeat the steps in (5) for each of the remaining variables (dur, F1s, F2s, ... F380) and print out the figures.

(7) Calculate the means for each variable, separately for each of the 4 talker groups.
Write a brief descriptive paragraph noting the patterns across the four groups.

```
x = F0s(find(talker_group_code==1));
mx = mean(x);
disp('Mean F0 for males:')
disp(mx);
```

(8) Find and remove all F0 values that are more than 2 standard deviations above or below the mean, remove these and re-calculate the mean F0. Does it change?

```
x = F0s(find(talker_group_code==1));
mx = mean(x);
disp('Mean F0 for males:')
disp(mx);
sd2 = std(x) * 2;
ind_higher = find( x > mx+sd2 );
ind_lower = find( x < mx - sd2 );
ind = intersection ( ind_higher, ind_lower );
x(ind) = [ ];
mx = mean(x);
disp('Mean F0 for males (outliers removed):')
disp(mx);
```