

7

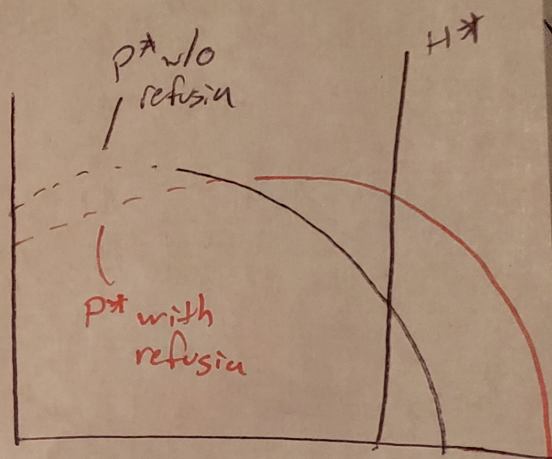
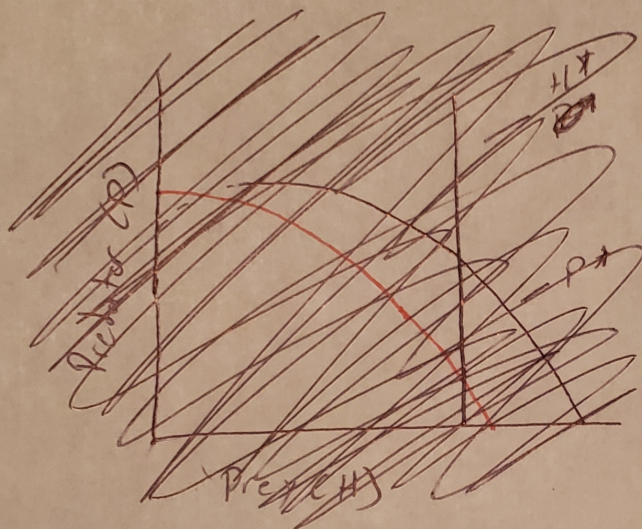
Without Prey Refuse:

$$\frac{dH}{dt} = \frac{rH - aHP}{1 + aT_n H}$$

$$\frac{dP}{dt} = \frac{eaHP - dP}{1 + aT_n H}$$

$$H^* = \frac{d}{ea - adT_n}$$

$$P^* = \frac{r}{a} + rT_n H$$



With Prey Refuse (h)

$$\frac{dH}{dt} = \frac{rH - a(H-h)P}{1 + aT_n(H-h)}$$

$$\frac{dP}{dt} = \frac{ea(H-h)P - dP}{1 + aT_n(H-h)}$$

$$H^* = \frac{d}{ea - adT_n}$$

unaffected; still a constant!

$$P^* = \frac{r}{a} + rT_n(H-h)$$

Now, we shift our curve to the right!