







FIGURE 1. Acros of  $Y$  of  $Y$  of  $Y$  of  $Y$  of  $Y$  of  $Y$  of  $Y$ the six designated habitats in relation to the observation point.

# $\begin{array}{ccccccccc}\n\textbf{F} & \textbf{I} & & & \textbf{F} & & \textbf{U} & & \textbf{Y} & \textbf{Y} & \textbf{M} & \textbf{S} & \textbf{I} & & & \textbf{W} \end{array}$

### 446 PHILLIPS, DAMANIA, HAYWARD, HENSON, LOGAN







### $\begin{array}{ccccc} \bullet & \bullet & \bullet & \bullet & \bullet \end{array}$  PHIS  $M_{\bullet}$  I FYW FES G





 $\begin{array}{c} \n\mathbf{r} \\
\mathbf{r} \\
\mathbf{r} \\
\mathbf{r}\n\end{array}$   $\begin{array}{ccc} \n\mathbf{r} \\
\mathbf{r} \\
\mathbf{r}\n\end{array}$   $\begin{array}{ccc} \n\mathbf{r} \\
\mathbf{r} \\
\mathbf{r}\n\end{array}$  $i6^-6$  **q** r **q** r **f**  $r$  **r** E r  $r = r$ 5

$$
i6 \frac{ex}{6} \frac{ex}{6} \frac{1}{1} = i
$$

**6. Estimating transition probabilities** p*ij* **from flow rates** *ij* **.**  $r$ , T  $\frac{1}{2}$  was estimated from  $\frac{1}{2}$  $\mathbf{r}$  data under the assumption that its entries remained constant  $\mathbf{r}$ each bin. This gave rise to 16 constant matrix  $\mathbf{r}_\mathbf{c}$  which were designated which were designated which were designated with which were designated with  $\mathbf{r}_\mathbf{c}$  $\frac{1}{1-\frac{1}{2}}$ ,  $\frac{16}{16}$ ,  $\frac{16}{16}$ ,  $\frac{16}{16}$ ,  $\frac{16}{16}$ ,  $\frac{16}{16}$ ,  $\frac{16}{16}$ we computed in the following way: a.  $\Delta$  be a small  $\Delta$  be a small interval in  $\Delta$  guid in  $\Delta$  guid in  $\Delta$  $\begin{array}{ccc} \mathbf{r} & \mathbf{r} & \Delta & \mathbf{i} \end{array}$  $\mathbf{r}$  bird in habitat will not depart to habitat will not depend to  $\mathbf{r}$ .  $x - \Delta - i \Delta$  .  $\delta$  and probability that a gull in  $\frac{1}{2}$  is  $\frac{1}{2}$  in  $\frac{1}{2}$  is  $\frac{1}{2}$  in  $\frac{1}{2}$  $\sum_{i=1}^{\infty}$  *i*  $\Delta$  .  $\sum_{i=1}^{\infty}$  **i**  $\sum_{i=1}^{\infty}$  is dependent in  $\sum_{i=1}^{\infty}$  is dep  $\frac{6}{i=1}$  *i*  $\Delta$ .  $\alpha$  assuming that  $\alpha$  time units  $\alpha$  time units  $\alpha$  is an interval time units  $\alpha$ independent event, the probability of not departing habitat during  $\sum_{i=1}^n$  is  $\sum_{i=1}^n$  if  $\sum_{i=1}^n$  and  $\sum_{i=1}^n$  if  $\sum_{i=1}^n$  is  $\sum_{i=1}^n$  if  $\sum_{i=1}^n$  $-$  **6 i**<sub>=1</sub> **i** Δ *h***/ <b>t**<sub>*i*</sub></sup>  $\Delta$  is vanishingly small, the probability of  $\mathbb{R}$  in the probability of not departing of not departing of  $\mathbb{R}$  in the probability of  $\mathbb{R}$  in the probability of  $\mathbb{R}$  in the probability of  $\mathbb{R}$  in the p  $\mathbf{r}$ 

## $\begin{array}{ccccccccc}\n\textbf{F} & \textbf{I} & & & \textbf{F} & & \textbf{U} & & \textbf{Y} & \textbf{Y} & \textbf{M} \textbf{F} & \textbf{S} & \textbf{I} & & & \frac{\textbf{S}}{\textbf{S}}\textbf{3}\n\end{array}$















**82 B**  $\sqrt{6}$  2 6 c 33<sup>6</sup> 6 6





 $\clubsuit 6$  PHIS  $M_{\bullet}$  I PIYW PES G



#### EEE ES

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A<sub>nd</sub>  $\blacksquare$  1999, Evergreen Pacific Tide Guide 1<sub>9</sub>, Every Europe Publ.  $\sum_{i=1}^{n}$   $\sum_{i=1}^{n}$ 

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