Favorite boating locations for fishing, cruising, nature viewing, sailing, and anchoring show a greater density and diversity of activities occurring around and near Boca Grande, Captiva and Redfish passes, and San Carlos Bay. Favorite fishing areas (Figure 4) are mapped by calculating densities from individual fishing locations displayed in Figure 3. Darker shades of red around Boca Grande, Captiva, and Redfish passes, the Useppa and Cabbage Key areas, Pelican Bay, and St. James City, illustrate important fishing destinations. Also highlighted are important fishing spots bordering the eastern portion of middle Charlotte Harbor between Punta Gorda Isles and Pirate Harbor, and tidal flats areas near Turtle and Bull Bays (see Appendix B, Maps A and B for place names).

Mapping High-Use Areas Through Data Integration

For the purposes of this report, two fishing representations that illustrate an integration of data from several survey methods are presented. The first maps weekend boating densities in expert-defined fishing areas (Figure 5). Weekend boating in expert-defined fishing areas is greatest at Gasparilla Pass, Shell Point (confluence of Caloosahatchee River and San Carlos Bay) and near spoil areas in San Carlos Bay. High densities are also calculated for Boca Grand and Captiva passes, Turtle Bay, and along the sea grass flats from Cape Haze north to the McCall Sand Flats.

The second integration offers a composite analysis (Figure 6) that combines expert-defined ‘primary’ fishing areas (Figure 2) with favorite fishing destinations identified by mail survey respondents (Figure 4). Darker shades of red identify areas of greatest congruence between experts and boaters. Integration of data from several methods expands the range of popular fishing destinations, and highlights specific locales that could be considered as high-use areas or hotspots. High-use areas include Redfish, Captiva and Boca Grande passes, Bull and Turtle Bays, the northern portion of Pine Island Sound, and areas near the small mangrove islands and tidal flats between Punta Gorda Isles and Pirate Harbor.

Experts accurately portrayed the range of fishing-use areas (Figure 2) when compared with the results of boater surveys. However, expert-aerial composite scores may have underestimated the intensity of use in certain locales (i.e., Redfish Pass, Bull Bay, the mangrove islands and tidal flats along the east bank of Charlotte Harbor between Punta Gorda Isles and Pirate Harbor, among the many islands within the northern portion of Pine Island Sound). Expert composite scores may have overestimated fishing use in Placida Harbor and Gasparilla Sound (Figure 5). One explanation for this discrepancy is that the many vessels in those areas, identified from aerial reconnaissance, may not actually be engaged in fishing activities. Conversely, mail surveys may have been deficient in identifying the McCall Sand Flats area and Gasparilla Pass as popular fishing and boating locales (Figure 4).
Figure 3. Favorite Activity Spots Identified by Mail Survey Respondents.
Figure 4. The Favorite Fishing Areas of Mail Survey Respondents.