REVIEW OF DEEP RADIO SURVEYS FOR YOUNG PULSARS

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In the past year we have been using the most sensitive radio telescopes to search for young pulsars in directed surveys of several promising candidates (including pulsar wind nebulae, EGRET γ-ray sources, and “radio quiet neutron stars”). We have discovered several interesting young objects, e.g., in 3EG J2227+6122 (at Jodrell Bank), in SNR G292.0+1.8 (at Parkes), in SNR 3C58 (at the GBT), and in SNR G54.1+0.3 (at Arecibo), among others. These pulsars are extremely weak radio sources (flux density at 1400 MHz as low as $S_{1400} \sim 50 \mu Jy$) and have low luminosity ($S_{1400} d^2 \sim 1$ mJy kpc$^2$). I will give an up-to-date review of these surveys.