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*Using Fibonacci Factors to Create Fibonacci Pseudoprimes,*  
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**Abstract**

Carmichael showed for sufficiently large  $L$ ,  $F_L$  has at least one prime divisor  $p$  such that  $p \equiv \pm 1 \pmod{L}$ . For a given  $F_L$ , we will show that a product of distinct odd prime divisors with this congruence condition is a Fibonacci pseudoprime. As a byproduct, this result leads to a proof of the presumably known result that if  $L$  is prime and  $F_L$  is composite, then  $F_L$  is a Fibonacci pseudoprime. Such pseudoprimes can be used in an attempt, here unsuccessful, to find an example of a Baillie-PSW pseudoprime, i.e., an odd Fibonacci pseudoprime  $n$  such that  $n \equiv \pm 2 \pmod{5}$  and is also a base-2 pseudoprime.