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A graph  $G$  is said to be pancyclic if  $G$  contains cycles of all lengths from 3 to  $|V(G)|$ . Let  $N(i, j, k)$  be the graph formed by associating paths of length  $i, j$ , and  $k$ , with distinct vertices of a triangle. We show that if  $G$  is 4-connected, claw-free, and  $N(i, j, k)$ -free with  $i + j + k = 6$  and  $i, j, k \geq 1$ , then  $G$  is pancyclic. This is best possible and extends a result of Gould, Łuczak, and Pfender. In addition, our results complete a characterization of pairs of forbidden subgraphs that imply pancyclicity. (Received September 13, 2012)