WHAT IS CLAIMED IS:

1. A first node that resides within a wireless network, the first node comprising:

a memory storing instructions; and

a processor that is coupled to the memory and, when executing the instructions:

receives data associated with remaining battery life of one or more other nodes that reside within the wireless network;

determines a value representing a remaining battery life of the first node;

computes a metric based on at least one of the remaining battery life of the one or more other nodes or the remaining battery life of the first node; and

transmits the metric to a second node within the wireless network.

2. The first node of claim 1, wherein the one or more other nodes reside on a path between the first node and a head node, and wherein the second node is at least one of a child node or a potential child node.

3. The first node of claim 1, wherein the data associated with the remaining battery life of the one or more other nodes comprises a table that includes, for each respective node of the one or more other nodes, a corresponding metric associated with a remaining battery life of the respective node.

4. The first node of claim 1, wherein the data associated with the remaining battery life of the one or more other nodes comprises a composite metric based on a remaining battery life of each node included in the one or more other nodes.

5. The first node of claim 4, wherein the composite metric is based on a minimum battery life from among the remaining battery lives of each of the one or more other nodes.

6. The first node of claim 4, wherein the composite metric is based on a value computed by multiplying together the remaining battery lives of each of the one or more other nodes.

7. The first node of claim 1, wherein the processor, when executing the instructions, further:

determines that the first node is designated as a sacrificial node; and

in response, increases the value representing the remaining battery life of the first node.

8. The first node of claim 1, wherein the processor, when executing the instructions, further determines that the first node is designated as a sacrificial node, wherein the metric is unaffected by the remaining battery life of the first node.

9. The first node of claim 1, wherein the processor, when executing the instructions, further:

determines that at least one of the first node and a third node included in the one or more other nodes is designated as a sacrificial node; and

in response, transmits an indicator to the second node that a path associated with the first node includes a node designated as a sacrificial node.

10. A first node that resides within a wireless network, the first node comprising:

a memory storing instructions; and

a processor that is coupled to the memory and, when executing the instructions:

receives a first metric from a first potential parent node included in the wireless network, the first metric indicating a remaining battery life associated with a first path to a head node that includes the first potential parent node;

receives a second metric from a second potential parent node included in the wireless network, the second metric indicating a remaining battery life associated with a second path that includes the second potential parent node; and

selects a parent node from the first potential parent node or the second potential parent node based at least in part on the first metric and the second metric.

11. The first node of claim 10, wherein the processor, when executing the instructions, further:

determines that the first metric indicates a higher remaining battery life than the second metric; and

in response, selects the first potential parent node as the parent node.

12. The first node of claim 10, wherein the processor, when executing the instructions, further:

determines that the first metric and the second metric are equal;

determines that the first path includes a sacrificial node;

determines that the second path does not include a sacrificial node; and

in response, selects the first potential parent node as the parent node.

13. The first node of claim 10, wherein the first metric reflects a first path cost associated with the first potential parent node, and wherein the second metric reflects a second path cost associated with the second potential parent node.

14. One or more non-transitory computer-readable media storing program instructions that, when executed by one or more processors, cause the one or more processors to perform the steps of:

receiving data associated with remaining battery life of one or more other nodes that reside within a wireless network;

determining a value representing a remaining battery life of a first node;

computing a metric based on at least one of the remaining battery life of the one or more other nodes or the remaining battery life of the first node; and

transmitting the metric to a second node within the wireless network.

15. The one or more non-transitory computer-readable media of claim 14, wherein the one or more other nodes reside on a path between the first node and a head node, and wherein the second node is at least one of a child node or a potential child node.

16. The one or more non-transitory computer-readable media of claim 14, wherein the data associated with the remaining battery life of the one or more other nodes comprises a table that includes, for each respective node of the one or more other nodes, a corresponding metric associated with a remaining battery life of the respective node.

17. The one or more non-transitory computer-readable media of claim 14, wherein the data associated with the remaining battery life of the one or more other nodes comprises a composite metric based on a remaining battery life of each node included in the one or more other nodes.

18. The one or more non-transitory computer-readable media of claim 17, wherein the composite metric is based on a minimum battery life from among the remaining battery lives of each of the one or more other nodes or a value computed by multiplying together the remaining battery lives of each of the one or more other nodes.

19. The one or more non-transitory computer-readable media of claim 14, wherein the instructions further cause the one or more processors to perform the steps of:

determining that the first node is designated as a sacrificial node; and

in response, increasing the value representing the remaining battery life of the first node.

20. The one or more non-transitory computer-readable media of claim 14, wherein the instructions further cause the one or more processors to perform the steps of:

determining that at least one of the first node and a third node included in the one or more other nodes is designated as a sacrificial node; and

in response, transmitting an indicator to the second node that a path associated with the first node includes a node designated as a sacrificial node.

WHAT IS CLAIMED IS:

1. A method comprising:

receiving, by a first node in a mesh network from a second node in the mesh network, a first battery life metric for a path through the mesh network;

determining, by the first node, a value representing a remaining battery life of the first node;

calculating, by the first node, a second battery life metric based on at least one of the first battery life metric for the path or the value representing the remaining battery life for the first node; and

transmitting, by the first node to a third node in the mesh network, the second battery life metric.

2. The method of claim 1, wherein the path is between the second node and a third node in the mesh network.

3. The method of claim 1, wherein the second battery life metric is for a path between the first node and a third node in the mesh network.

4. The method of claim 1, wherein the first battery life metric is based on a minimum battery life from among respective remaining battery lives of individual nodes of a plurality of nodes along the path.

5. The method of claim 1, wherein the first battery life metric comprises a composite metric based on respective remaining battery lives of individual nodes of a plurality of nodes along the path.

6. The method of claim 5, wherein the composite metric is based on a value calculated by multiplying together the respective remaining battery lives of the individual nodes of the plurality of nodes along the path.

7. The method of claim 1, further comprising in response to determining that the first node is designated as a sacrificial node, increasing, by the first node, the value representing the remaining battery life of the first node.

8. The method of claim 1, further comprising in response to determining that the first node is designated as a sacrificial node, calculating, by the first node, the second battery life metric independent of the value representing the remaining battery life for the first node.

9. A method comprising:

receiving, by a first node in a mesh network, respective battery life metrics for individual paths in a set of paths from the first node to a second node in the mesh network;

selecting, by the first node, a first path from the set of paths based on the respective battery life metrics; and

transmitting, by the first node, a message to the second node using the first path.

10. The method of claim 9, wherein selecting the first path based on the respective battery life metrics comprises determining that a first respective battery life metric for the first path is a largest one of the respective battery life metrics.

11. The method of claim 9, wherein selecting the first path based on the respective battery life metrics comprises:

determining that a first respective battery life metric for the first path is a largest one of the of the respective battery life metrics;

determining that the first respective battery life metric is equal to a second respective battery life metric for a second path from the set of paths;

determining that the first path includes a sacrificial node; and

determining that the second path does not include a sacrificial node.

12. The method of claim 9, wherein a first respective battery life metric for the first path is received from a neighboring node of the first node that is along the first path.

13. The method of claim 9, wherein a first respective battery life metric for the first path is a composite metric based on respective remaining battery lives of individual nodes of a plurality of nodes along the first path.

14. The method of claim 13, wherein the composite metric is based on a value computed by multiplying together the respective remaining battery lives of the individual nodes of the plurality of nodes along the first path.

15. The method of claim 9, wherein a first respective battery life metric for the first path is based on a minimum battery life from among respective remaining battery lives of individual nodes of a plurality of nodes along the first path.

16. A first node in a mesh network, comprising:

one or more processors; and

a memory storing executable instructions that, when executed by the one or more processors, cause the one or more processors to:

receive, from a second node in the mesh network, battery life information for a path through the mesh network;

determine an amount indicating a remaining battery life of the first node;

determine a battery metric based on at least one of the battery life information for the path or the amount indicating the remaining battery life of the first node; and

send, to a third node in the mesh network, the battery metric.

17. The first node of claim 16, wherein the battery life information comprises a table that includes respective remaining battery life information for individual nodes of a plurality of nodes along the path.

18. The first node of claim 16, wherein the battery life information comprises a composite battery life metric based on respective remaining battery information of individual nodes of a plurality of nodes along the path.

19. The first node of claim 18, wherein to determine the battery metric, the one or more processors are caused to multiply the amount indicating the remaining battery life of the first node and the composite battery life metric to generate the battery metric.

20. The first node of claim 18, wherein to determine the battery metric for the path, the one or more processors are caused to select a smaller of the amount indicating the remaining battery life of the first node and the composite battery life metric as the battery metric.