CLAIMS

1. A fishing state detection/transmission device that comprises a grip portion and is provided on a fishing rod to which a fishing line having a fishing hook is attached at an end, the fishing state detection/transmission device comprising:

a vibration generation unit that is provided on the grip portion and generates vibration in the grip portion;

a first detection unit that is provided on the fishing rod, and detects movement or vibration of the fishing rod to generate first time-series data;

an information processing unit that transmits a vibration generation signal to the vibration generation unit on a basis of the first time-series data; and

a fishing line length detection unit that is provided on the fishing rod, detects a length of the fishing line to generate third time-series data, and detects change in fishing line length to generate fourth time-series data, wherein

in a case where the third time-series data and the fourth time-series data satisfy a predetermined condition, the information processing unit prevents transmission of the vibration generation signal to the vibration generation unit.

2. The fishing state detection/transmission device according to claim 1, wherein the vibration generation unit comprises an actuator unit that vibrates the grip portion, and drives the actuator unit on a basis of the vibration generation signal from the information processing unit.

3. The fishing state detection/transmission device according to claim 2, wherein the actuator unit is a plate-shaped actuator.

4. The fishing state detection/transmission device according to any one of claims 1 to 3, wherein the vibration generation unit generates a first vibration in a case where the first time-series data indicates that a fish is approaching the fishing hook.

5. The fishing state detection/transmission device according to any one of claims 1 to 3, wherein the vibration generation unit generates a second vibration in a case where the first time-series data indicates that the fishing rod is luring fishes.

6. The fishing state detection/transmission device according to any one of claims 1 to 3, wherein the vibration generation unit generates a third vibration in a case where the first time-series data indicates fish bite to the fishing hook.

7. The fishing state detection/transmission device according to any one of claims 1 to 6, wherein the first detection unit is provided at a position at which deformation and vibration of the fishing rod are capable of being detected.

8. The fishing state detection/transmission device according to any one of claims 1 to 7, wherein the first detection unit is provided at a position at which curvature variation of the fishing rod is great.

9. The fishing state detection/transmission device according to any one of claims 1 to 8, further comprising a second detection unit that is provided on the grip portion, detects movement made by an operation of the fishing rod, and generates second time-series data, wherein the information processing unit transmits the vibration generation signal to the vibration generation unit on a basis of the first time-series data and the second time-series data.

10. The fishing state detection/transmission device according to any one of claims 1 to 9, further comprising a fishing line length detection unit that is provided on the fishing rod, detects a length of the fishing line to generate third

time-series data, and detects change in fishing line length to generate fourth time-series data, wherein in a case where the third time-series data and the fourth time-series data satisfy a predetermined condition, the information processing unit does not transmit the vibration generation signal to the vibration generation unit.

11. The fishing state detection/transmission device according to claim 10, further comprising a transmission unit, wherein at least one of the second time-series data detected by the second detection unit, the third time-series data detected by the fishing line/fishing line length change detection unit or the fourth time-series data detected by the fishing line/fishing line length change detection unit is transmitted to external communications.

12. The fishing state detection/transmission device according to any one of claims 1 to 11, further comprising a transmission unit, wherein the first time-series data detected by the first detection unit is transmitted to external communications.

13. The fishing state detection/transmission device according to any one of claims 1 to 12, further comprising a reception unit, wherein data regarding a fishing condition is received from external communications, and the information processing unit transmits the vibration generation signal to the vibration generation unit with reference to the data.

14. A fishing rod comprising the fishing state detection/transmission device according to any one of claims 1 to 13.