

Classified List.

1. Methods.

Abderhalden, in course of publication. Anon, 1930 (a), 1930 (b). Chidester, 1921. Hamilton, 1922. Reighard, 1908 (1910) (a), 1908 (1910) (b). Shelford, 1929. Szymanski, 1914.

2. General.

1. GENERAL NATURAL HISTORY.

Alcock, 1902. Beebe, 1926, 1928. Calderwood, 1930. Carter and Beadle, 1930. Damant, 1920. Day, 1881. Dean, 1896. Deraniyagala, 1929. Gill, 1908 (1910). Graham, 1931. Gurley, 1902. Herrick, 1919. Huet, 1904. Jeannel, 1926. Kyle, 1926. Lahille, 1926. Leiner, 1931. Leonardt, 1909. Lepinay, 1909. Lubbock, 1888. Lydell, 1902. Meek, 1930. Menzies, 1925. Needham and Lloyd, 1916. Norman, 1931. Parker, 1907, 1908. Pearce, 1926. Pycraft, 1912. Regnard, 1891. Romanes, 1883. Rose, 1929. Roule, 1914, 1922, 1926—. Rutter, 1902, 1902 (1904). Sanford, 1903. Shufeldt, 1900. Shelford, 1911, 1912, 1913, 1914 (a), 1914 (b), 1929. Thorndike, 1899. Ward, F., 1911, 1919. Ward, H. B. and Whipple, 1918.

2. GENERAL OBSERVATIONS OF BEHAVIOUR IN CAPTIVITY.

Auer, 1909. Bateson, 1889—90 (a), 1892. Bolau, 1905. Boulenger, 1929. Brehm, 1871. Brown, E. M. 1929. Elmhirst, 1902, 1912. Miles, 1931. Piéron, 1914. Schmidlein, 1879. Townsend, 1929. Wunder, 1927 (1928), 1930.

3. WORKS ON COMPARATIVE PHYSIOLOGY AND PSYCHOLOGY, ETC. CONTAINING INFORMATION ON GENERAL BEHAVIOUR OR SENSORY REACTIONS OF FISHES.

Baglioni, 1912, 1913. Buddenbrock, 1924. Buytendijk, 1918, 1928. Dambeck, 1878. Fiebriger, 1923. Goldsmith, 1924, 1927. Gurley, 1909. Haempel, 1912. Hempelmann, 1926. Herrick, 1924. Hogben, 1926. Holmes, 1911. Johnston, 1906. Kafka, 1922. Koehler, 1920, 1922, 1924, 1926, 1928. Kuhn, 1919, 1925. Loeb, 1905, 1913. Plate, 1924. Reighard, 1903, 1917. Watson, 1914. Washburn, 1926. Vincent, 1914. Uexküll, 1905.

3. Sensory Discrimination.

1. CHEMICAL SENSE.

(a). Reactions to Salinity: Hydrotaxis: Chemotaxis: Reactions to non-sapid substances.

Bull, 1928. Calderwood, 1891—2. Chaper, 1883. Chidester, 1920, 1922, 1924. Crozier, 1916. Dahl, 1904. Daugherty and Altman, 1925. Franz, 1909. Garrey, 1916.

Herter, 1926, 1927. Loeb, 1912, 1913 (a). Miles, 1918. Parker, 1912. Quigley, 1928. Shelford, 1909. Shelford and Allee, 1914. Sumner, 1905 (b). Wells, 1915 (a). Young, 1923.

(b) Reactions to Pollution: Effects of Oxygen Deficiency or Excess, Acidity, etc.

Birge and Juday, 1911. Brown and Jewell, 1926. Bull, 1930 (1931), 1931. Das, 1927. Daugherty and Altman, 1925. Foerster, 1929 (a). Gardiner, 1927. Gardner, 1926. Gardner and Leetham, 1914. Garrey, 1926. Gutsell, 1929. Heldt, 1926. Huet, 1904. Jackson, 1930. Jewell and Brown, 1924. (See also Brown and Jewell.) Juday and Wagner, 1908. Loeb, 1912. Marsh, 1908. Miles, 1918. Packard, 1905. Powers, 1917, 1921. Richet and Oxner, 1926. Roule, 1914, 1915. Roule and de Drouin de Bourville, 1927. Shelford, 1913, 1914, 1915, 1917, 1918, 1923, 1929. Shelford and Allee, 1912, 1913, 1914. Shelford and Powers, 1915. Thompson, 1925. Wells, 1913, 1915, 1918. White, 1915. Young, 1923.

2. OLFACTION.

Aronsohn, 1884. Baglioni, 1909 (a), 1909 (b), 1910, 1912. Bateson, 1889—90 (a). Beebe, 1926. Bull, 1929 (1930), 1930 (a). Berghe, 1929. Bowen, 1931. Copeland, 1912. Craigie, 1926. Dofflein, 1911. Frisch, 1924 (a). Herklotz, 1864. Hughes, 1891—2. Knight, 1910. Nagel, 1894. Olmsted, 1918. Parker, 1910 (a), 1910 (b), 1911 (a), 1911 (b), 1912, 1913 (1914), 1914, 1922. Parker and Sheldon, 1913. Parmentier, 1803. Pipping, 1927 (a), 1927 (b). Sheldon, 1911. Strieck, 1924. Wunder, 1927.

3. GUSTATION.

Reactions to sapid substances.

Baglioni, 1910, 1912. Bateson, 1889—90 (a). Bull, 1929 (1930), 1930 (a). Dawes, 1929. Dofflein, 1911. Frisch, 1924. Herklotz, 1864. Herrick, 1903. Herter, 1925. Nagel, 1894. Parker, 1908, 1912, 1922. Sheldon, 1909. Strieck, 1924. Wunder, 1927. Pipping, 1927 (a), 1927 (b).

4. AUDITION.

Response to Vibrations (excluding ultra-sonic).

Auer, 1909. Baglioni, 1912. Bateson, 1889—90 (a). Bernouilli, 1910. Bigelow, 1904. du Bois Reymond, 1917. Bowen, 1931. Brüning, 1916. Bull, 1928, 1930 (a), 1930 (b). Coles, 1914. Denker, 1931. Edinger, 1908. Evans, 1930. Frisch, 1923 (a), 1929, 1931 (a), 1931 (b). Haempel, 1911. Hensen, 1904. Körner, 1905, 1910, 1916 (a), 1916 (b), 1919. Körner and Grünberg, 1920. Krause, 1918. Kreidl, 1892, 1895, 1896, 1926. Kuroda, 1926. Lafite-Dupont, 1907. Lang, 1900—1. Lee, 1898. Lenz, 1906. McDonald, 1922. Maier, 1904. Mangold, 1913. Manning, 1924. Marage, 1906. Meyer, 1909. Morgan, 1924. Nollet, 1813. Parker, 1903 (a), 1903 (b), 1904 (1905), 1908 (1910), 1909, 1910, 1911 (1913), 1918. Parker and van Heusen, 1917 (b). Payne, 1909. Piper, 1906 (a), (b), 1910 (1911). Reeker, 1898. Regnart, 1927—28. Rode, 1927, 1929. Rivera, 1905. Schultze, 1870. Stetter, 1928, 1929. Triplett, 1901. Tullberg, 1903. Zacharias, 1906. Zenneck, 1903, 1904. Werner, 1929. Westerfield, 1922. Winterstein, 1909.

5. TACTILE SENSE.

(a). Reactions to Touch.

Baglioni, 1909 (a), 1909 (b), 1912, 1913. Bateson, 1889—90 (b). Herter, 1925, 1929. Bowen, 1931. Crozier, 1918. Lyon, 1904 (1905). Parker and Van Heusen, 1917 (a), 1917 (b). Steven, 1930. White, 1915.

(b). Reactions to Contact: Thigmotaxis: Stereotaxis.

Maxwell, 1921 (a), 1921 (b). Miles, 1918. Cotte, 1921. Koehler, 1922.

6. TEMPERATURE SENSE. Thermotaxis.

Bull, 1928, 1930 (a). Hathaway, 1927. Herter, 1925, 1926. Loeb and Wasteney, 1912. Lumby and Atkinson, 1929. Michael, 1907. Miles, 1918. Thompson, 1926. Wells, 1914.

7. REACTIONS TO ELECTRIC CURRENT.

Galvanotaxis.

Alluand and Vlès, 1911. Blasius and Schweizer, 1893. Breuer, 1905. Brown, O. H., 1903. Bull, 1928. Fujita, 1906. Gertz, 1911. Ohta, 1924. Okada, 1929 (a), 1929 (b). Parker and van Heusen, 1917 (a). Ramstedt, 1872. Regnard, 1931 (a), 1931 (b). Scheminsky, 1924, 1927. Thornton, 1931.

8. REACTIONS TO PRESSURE.

Evans and Damant, 1928. Garrey, 1916. Pfuller, 1914. Regnard, 1891. Scheuring, 1921 (b), 1923. Sumner, 1905.

Response to Barometer Changes.

Bettoni, E., 1867. Dankler, 1899, 1902.

9. VISION.

(a). Perception of Objects: Visual Images: Reactions to mirror images.

Apgar, 1886—8. Arey, 1919. Barton, 1930. Bateson, 1889—90 (a). Bowen, 1931. Bull, 1928. Clausen, 1931. Dudgeon, 1871. Garrey, 1905. Graham, 1931. Gurley, 1902. Harding, 1931. Herter, 1929, 1930. Frisch, 1925. Lanik, 1914. Longley, 1923, 1924. Plateau, 1866. Reinhardt, 1902. Rizzolo, 1926. Russell, E. S., 1931. Schaller, 1926. Schultze, L., 1915. Spooner, 1931. Stagner, 1931. Steven, 1930. Trojan, 1914. Tschermak, 1902, 1914, 1915. Verrier, 1927, 1928, 1929 (a). 1931 (a), 1931 (b). Viguerron, 1913. Weve, 1913. White, 1919. Wood, 1906 (a), (b). Zezula, 1909.

Reactions to mirror images.

Spooner, 1931. Zezula, 1909.

(b). Colour perception.

Bauer, 1909, 1910, 1911. Bull, 1928, 1930 (a). Burkamp, 1923. Eisig, 1884. Franz, 1910 (a), 1914. Freytag, 1914. Frisch, 1911 (a), 1912 (a), 1913 (a), 1913 (b), 1914, 1923 (b), 1924 (a), 1924 (b), 1925. Graber, 1884. Grundfest, 1931. Hamburger, 1926. Hamilton, 1922. Harding, 1931. Herter, 1929, 1930. Hess, 1909, 1910, 1911, 1912, 1913 (a), 1913 (b), 1913 (c), 1914, 1919, 1922. Hineine, 1927. Kafka, 1914. Kühn, 1924. Memner, 1929. Minkiewitz, 1912. Ohashi, 1921. Polimanti, 1916. Reeves, 1919. Reig-hard, 1908. Rizzolo, 1926. Schiemenz, 1924. Schnurmann, 1920. Stagner, 1931. Trojan, 1914. Uhlenhuth, 1911. Verrier, 1927, 1928, 1929. Warner, 1931. Washburn and Bentley 1906. Weve, 1913. White, 1919. Zolotnitzki, 1901.

4. Spatially determined Reactions.

1. MOVEMENTS.

Equilibration: Stability: Orientation to Gravity: Geotropism.

Abel, 1926. Alluand and Vlès, 1911. Bauer, 1925. Bennett, 1899. Bethe, 1894, 1899, 1910. Bickel, 1896. Bigelow, 1904. du Bois Reymond, 1917. Breder, 1926. Brehm, 1871. Cyon, 1878, 1900 (a), 1900 (b), 1908. Damant, 1925. Evans and Damant, 1928. Fröhlich, 1905. Gouriet, 1866. Grünberg, 1907. Houssay, 1912. Kreidl, 1892. Labbé and Dupont, 1927. Lafite-Dupont, 1905. Lee, 1892, 1894, 1895, 1898. Magnan, 1929, 1930. Magnan and St. Lague, 1928, 1929. Mangold, 1913. Maxwell, 1923. Mast, 1915. Möbius, 1873, 1878. Monoyer, 1866 (a), 1866 (b). Parker, 1910 (a). Parker and van Heusen, 1917. Polimanti, 1911 (b), 1912 (a—c), 1913. Rizzolo, 1929. Schaefer, 1921. Schlesinger, 1911. Schmassmann, 1926. Sewall, 1884. Steinmann, 1913. Stekhoven, 1928, 1930. Ward, H. B., 1910 (a—c). White, 1915.

Geotropism.

Loeb, 1891.

2. ORIENTATION TO LIGHT.

Diurnal movements: Day and Night habits. Visual responses (general).

Arey, 1919. Baglioni, 1910, 1912. Barton, 1930. Bateson, 1889—90 (d), 1889—90 (e). Bauer, 1905, 1909, 1910, 1911, 1925. Boulenger, 1929. Crozier, 1921. Damant, 1921. Eisig, 1883, 1884. Exner and Januschka, 1905, 1906. Franz, 1909, 1910 (a—c), 1911, 1913 (b), 1914, 1924. Freytag, 1914. Frisch, 1923, 1924 (b), 1925. Garten, 1907. Herter, 1927. Hess, 1914. Holt, 1893—5. Jeanel, 1926. Jordan, 1917 (a). Lecke, 1912. Loeb, 1894, 1908. Long, 1904. Main, 1928. Mast, 1911. Mertens, 1915. Miehe, 1911. Miles, 1918. Milewski, 1915. Möbius, 1867. Moore 1909. Parker, 1905, 1909, 1910 (a). Parker and Lanchner, 1922. Payne, 1907. Petersen, 1906. Plate, 1924. Plateau, 1866. Rádl, 1903, 1906. Rowan, 1926, 1929. Russ, 1925. Russell, F. S., 1926—7 (a—c), 1928, 1930. Scharrer, 1928, 1929. Schreitmüller and Reilinghaus, 1926. Schultze, L., 1915. Shelford, 1914 (b), Smith, 1916. Tauti and Hayasi, 1926. Walls, 1928. Wunder, 1924, 1926(a—c).

3. ORIENTATION TO CURRENTS, TIDES, ETC. RHEOTROPISM (-TAXIS).

Baglioni, 1913. Clark, 1925. Clausen, 1931. Daugherty and Altman, 1925. Franz, 1910 (a), 1910 (b). Garrey, 1905. Gurley, 1902. Herter, 1925, 1926. Hofer, 1907. Hunt, 1885. Huntsman, 1918. Jackson, 1930. Jordan, 1917 (a), 1917 (b). Kafka, 1922. Kreidl, 1895. Lee, 1898. Loeb, 1913. Lyon, 1900, 1904 (1905), 1905, 1909. Main, 1927. Mangold, 1913. Michael, 1907. Miles, 1918. Parker, 1904, 1905. Rutter, 1902, 1904. Schiemenz, 1927. Shelford, 1914 (a), 1914 (b). Smirnov, 1924. Steinmann, 1914 (a), 1914 (b), 1928. White, 1915. Chidester, 1921, 1922. Tullberg, 1903.

4. SHOALING.

Allen, 1923. Bateson, 1889—90 (a). Boulenger, 1929. Bowen, 1931. Breder, 1929. Parr, 1927, 1931. Spooner, 1931. Tauti and Hayasi, 1926. Tauti and Miyosi, 1929. Tauti and Hudino, 1929. Tauti and Yasuda, 1929, 1930.

5. MIGRATIONS.

Influence of varying external Conditions.

Bull, 1929 (1930), 1930 (1931), 1931. Chevey, Roule, and Verrier, 1927. Chidester, 1920, 1921, 1922, 1923, 1924. Clark, 1925. Craigie, 1926. Foerster, 1929 (a), 1929 (b).

Franz 1909, 1910 (b), 1910 (e), 1912 (a). Gardner, 1926. Garrey, 1916. Greene, 1926. Gregory, 1929. Gurley, 1909. Jaeger, 1911. Juday and Wagner, 1908. Kühn, 1919. Künstler, 1913. McDonald, 1885. Mast, 1915. Meek, 1916. Petersen, 1906. Powers, 1921. Prince, 1920. Rich and Holmes, 1928. Roule, 1914, 1915, 1916, 1922, 1926. Roule and de Drouin de Bourville, 1927. Rowan, 1926. Scheuring, 1929, 1930. Waltoniensis, 1931. Ward, 1927, 1930. Willis-Bund, 1902.

5. Other Reactions of the Organism as a whole.

1. FOOD FINDING.

Bateson, 1889—90 (a), 1892. Buytendijk, 1919. Chadwick, 1929. Cronheim, 1911. Damant, 1921. Drzewina, 1909. Elmhirst, 1909. Franz, 1909—10. Herrick, 1902. Hughes, 1891—2. Knight, 1910. Lebour, 1916—18, 1919—22, 1923—25. Lepinay, 1907. Mellen, 1927. Pipping, 1927 (a), 1928 (b). Scheuring, 1921. Schiche, 1921. Schiemenz, 1928. Steven, 1930. Uexküll, 1895. Wilson, 1893. Verrier, 1929 (b). Wunder, 1927, 1928, 1929.

2. ESCAPE FROM ENEMIES.

Buytendijk, 1930. Franz, 1913 (b). Lebour, 1923—5. Mast, 1915.

3. COLOUR CHANGE (ADAPTIVE)

Bordage, 1911. Connolly, 1925. Cunningham, 1891, 1893—5, 1895—7. Cunningham and MacMunn, 1893. Frisch, 1911 (b), 1912 (b), 1912 (c), 1913 (a). Fukui, 1927. Haempel and Kolmer, 1914. Hewer, 1926 (a), 1926 (b). Hogben, 1926. Jost, 1926. Kunst, 1917. Kurz, 1920. La Blanchère, 1872. Loeb, 1912. Longley, 1917, 1924. Mast, 1915 (a), 1915 (b), 1916. Miles, 1918. Pauli, 1926. Pouchet, 1871, 1873. Reighard, 1908 (1910), 1909. Rynberk, 1906. Schoendorff, 1903. Schnakenbeck, 1925. Schnurmann, 1920. Secerov, 1909, 1913, 1914. Stark, 1832. Sumner, 1905 (a), 1910, 1911 (a), 1911 (b). Sumner and Keys, 1930. Townsend, 1929. Verrier, 1929 (b).

4. COLOUR CHANGE (EMOTIONAL).

Bateson, 1889—90 (c). Bolles, 1867. Cunningham, 1889—90. Dallas, 1895. Holt and Byrne, 1897—9.

5. SLEEP. HYPNOSIS. SHOCK REACTION.

Babak, 1917. Boulenger, 1929. Chauchard, 1930. Eisig, 1883. Hughes, 1874. Kreidl, 1916. Leeke, 1912. Möbius, 1867. Polimanti, 1911. Reinhardt, 1911, 1912, 1913. Reuss, 1911. Romeis, 1911. Szymanski, 1914, 1916. Unrath, 1918. Werner, 1911. Wunder, 1927.

6. PAIN

Bentley, 1881. Ziegler, 1924.

7. REPRODUCTION AND CARE OF YOUNG.

a. Sexual and Spawning Behaviour.

Brown, 1929. Clark, 1925. Cowan, 1928. Dean, 1912. Newman, 1907. Reeves, 1907. Reighard, 1903, 1904, 1908 (1910), 1920.

b. Parental Care. Nest Building.

Guitel, 1893. Leiner, 1931 (a), 1931 (b). Meek, 1915. Piéron, 1914. Pycraft, 1912. Wunder, 1927, 1928, 1930, 1931.

8. SPECIAL HABITS.

Auer, 1909 (Effect of earthquakes). Bettoni, 1867 (. . . Barometer changes). Braunschmid, 1930 (Time sense). Cocks, 1910 (Yawning). Coles, 1914 (Effect of thunder). Dankler, 1899 (. . . Barometer changes). Elmhirst, 1910, 1912 (Yawning). Graham, 1931 (Crowd excitement, due to various causes; Effect of). Holt, 1893—5 (Eye retraction to objects). Inwards, 1898. (Effects of weather, various). Mellen, I. (Sense of numbers). Michael, 1907 (Effect of wind). Philippsen, H. 1913 (Weather). Whitmee, 1878 (Emotional manifestations).

9. LEARNING. ASSOCIATION. MEMORY. HABIT FORMATION CONDITIONED RESPONSES. HOMING INSTINCT.

Anon, 1910. Athanassopoulos, 1931. Bateson, 1889—90 (a). Bauer, 1904. Braunschmid, 1930. Bull, 1928, 1929 (1930), 1930 (a). Buytendijk, 1918, 1919, 1928. Buytendijk and Remmers, 1923. Cason, 1925. Churchill, 1916. Crivelli-Serbelloni, 1900. Dankler, 1902. Dantan, 1902. Demoll, 1921. Edinger, 1899. Faraday, 1879. Franz, 1912 (a), 1912 (b), 1913 (a). Frisch, 1923, 1925. Froloff, 1925, 1926, 1928. Giard, 1897. Goldsmith, 1905, 1912, 1924, 1927. Hanko, 1925. Herter, 1929, 1930. Holmes, 1911. J. J., 1897. Landois, 1897. Lepinay, 1907. Longley, 1923, 1924. McDonald, 1922. McIntosh, 1898. Meek, 1930. Mellen, 1930. Milner, 1880. Minkiewicz, 1912. Möbius, 1873: Morgan, 1924. Oxner, 1912 (a—e). Parker, 1903, 1909. Parville, 1897. Perkins and Wheeler, 1930. Perkins, 1931. Piéron, 1908, 1910, 1914. Reeker, 1898. Reighard, 1908, 1917. Rich and Holmes, 1928. Rivera, 1905. Roule, 1926. Russell, E. S., 1931. Schwarz, 1911. Snyder and Scofield, 1924. Stetter, 1928, 1929. Thierfelder, 1911. Thorndike, 1899, 1911. Triplett, 1901. Uhlenhuth, 1911. Washburn and Bentley, 1906. Welty, 1930. Westerfield, 1922. White, 1919. Wolff, 1925. Zur Mühlen, 1911.

6. Development of Behaviour.

Paton, 1907, 1911. Tracy, 1925, 1926. White, 1915. Wintrebert, 1920.

7. General Psychic Life.

Dambeck, 1878. Demoll, 1921. Jarmer, 1928. La Blanchère, 1876. Ohm, 1909. Romanes, 1883. Sanford, 1903.

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