— The Realty Section was able to conserve parcels in 45 projects totaling 5629 acres. The bulk of the funding continued to be provided from bond capital administered through the Department. Conservation restrictions comprised the majority of the acreage due to the 3688-acre W.D. Cowls, Inc., project in Leverett and Sunderland. Important fee acquisitions included properties in Chesterfield, East Bridgewater, West Brookfield and Winchendon.

——There was no significant legislation other than the provision for the free minor fishing license.

**July to December 2012**: The Board voted to approve the changes to the fall turkey hunting season and to increase the untagged deer possession limit (see above). The on-line game check aspect of the electronic licensing system was delayed until the spring 2013 turkey season due to implementation challenges on the part of the vendor.

There were 4119 returning Atlantic salmon recorded at the Holyoke fish lift between 1955-2011<sup>48</sup> and  $\approx$ 137.6 million Atlantic salmon fry and  $\approx$ 5.4 million smolts stocked in the Connecticut River watershed between 1967 to 2011<sup>49</sup>. The U.S. Fish & Wildlife Service ceased Atlantic Salmon propagation at the White River National Fish Hatchery in July 2012 due to extensive damage from Hurricane *Irene*. The Service has also begun an evaluation of the restoration effort on the Merrimack River, which may lead to cessation of the Service's involvement in that river basin. Massachusetts will cease stocking of Atlantic salmon fry in the Connecticut River basin in spring 2013<sup>50</sup>.

There were 15,000 American shad recorded at Holyoke in 1960, 66,000 in 1970, 380,000 in 1980, 360,000 in 1990, 225,000 in 2000, and 164,000 in 2010<sup>48</sup>. There were 490,431 shad lifted in 2012, 247% of the previous 10-year mean.

The Division's goals for wildlife habitat now call for 20-25% of uplands in open habitats and 70-80% in a full canopy forest condition (including 10-15% in forest reserves)<sup>51</sup>. Active management on 2041 acres of Division lands since 1996<sup>51</sup> has since restored grasslands, shrublands, aspen stands, and abandoned orchards, regenerated young forests, and converted sterile Norway spruce plantations.

The contract for the new Field Headquarters building was let and the existing "Richard Cronin Building" was scheduled for demolition. During the summer of 2012, field headquarters staff packed up those records, supplies and equipment to be transferred to a temporary office or to the Districts or slated for disposal. By September 7, all staff had relocated to 100 Hartwell Street in West Boylston. The old facility was then demolished and ground-breaking for the new "green" Field Headquarters (Figure 65) was held on December 19, 2012.

#### IN SUMMARY: THE ESSENCE OF WILDLIFE MANAGEMENT<sup>1</sup>

"History gives us a kind of a chart, and we dare not surrender even a small rushlight in the darkness. The hasty reformer who does not remember the past will find himself condemned to repeat it"— John Buchan (1923)<sup>2</sup> The Commissioners of Fisheries were not a spontaneous creation, arisen from the ashes of the Civil War as a Legislative epiphany and charged with the sudden and striking knowledge that riverine dams forbid the passage of fish. Europeans had interacted with the woodlands, waters and wildlife of Massachusetts since 1600 (and before). Their habitations and agricultural plots, their hunting, fishing, and timbering practices and their trade networks were simply cultural variations of those erected or practiced by the Native Americans who came before.

Indeed, the Massachusetts landscape and those on it were then different from what it had become by 1866—and what it would become in 2012— but it was hardly unchanged, certainly not unchanging. Yet, in looking backward, we should not indulge in presentism—we should not anachronistically project present day ideas and perspectives into the past.

Nature is inconstant<sup>3</sup>, and so is human society. The Commonwealth builder John Winthrop, the Pynchons, settlers and traders, the patriot John Adams, the botanist George Emerson, the advocate William Apess, the essayist Ralph Waldo Emerson, the fish culturist Theodore Lyman, the administrator William Adams, the ornithologist Joseph Hagar, the educator Reuben Trippensee, the naturalist John Phillips, the scientist William Sheldon, and the Director Richard Cronin and their fellows were all subsumed within their temporal environments. Their accomplishments were several, their failures occasional. They were all affected, directly and indirectly, by the social, political, economic, educational, cultural, literary, scientific, and religious perspectives of their generations, the temper of their times<sup>4</sup>. They sought, as all settled peoples do, to derive food and shelter for their families, create a governing structure to organize their society, and to engage in economic and cultural practices appropriate to the sustenance of their needs and desires. In their own unique ways, they also sought comprehension of the world around them and to carry that world into the future, not only for utilitarian reasons but to carry forward a framework of ideas and beliefs-the Weltanschauung by which we the people interpret and interact with the world. The Commissioners of Fisheries, and their successors, colleagues, and constituents, are the propagators, beneficiaries, and stewards of those evolved and evolving ideas and beliefs.

"Time present and time past

Are both perhaps present in time future.

And time future contained in time past."- T.S. Eliot (1943)<sup>5</sup>

In 1866, the two male Commissioners of Fisheries had themselves, an office, one statute and \$7000 (provided from general appropriations) to carry out the duties charged to them by law<sup>6,7</sup>. Nearly 150 years later, their successor entity, the Division of Fisheries & Wildlife, employed 146 full-time employees<sup>8</sup> and 15 contractors led by a professionally trained Director (Figure 66) under the oversight of a seven-person citizen's board and grouped into six sections comprising administration, fisheries, information and education, natural heritage and endangered species, realty, and wildlife.

In May 1977, the Division hired its first woman for a professional position. By 2013, women comprised 36% of the agency's staff, the majority in scientific or technical positions<sup>9</sup>. The Division now administers or operates under the authority of two



Figure 66. Director Wayne MacCallum (left) and Board Chairman George Darey (right), 2012.

chapters of the General Laws<sup>10</sup>, comprising 132 sections, and an extensive Code of Regulations<sup>10</sup>, comprising 11 chapters. Its facilities include an administrative suite in Boston, a temporary Field Headquarters in West Boylston (pending construction of a new state-of-the-art building in Westborough), five District offices in northeastern, southeastern, central, Connecticut Valley, and western Massachusetts, and five fish hatcheries in the southeastern and Connecticut Valley regions. In 2012, the Division held in fee 160,456 acres of wildlife management areas and other properties and 35,614 acres in conservation easements<sup>11</sup>. The revenue accrued to the Inland Fisheries & Game Fund<sup>12</sup> in FY12 was \$14,111,080 from departmental revenues (55%, primarily licenses and permits), federal aid reimbursements (38%), tax apportionments (6%) and reimbursements and miscellaneous (1%). The Natural Heritage & Endangered Species Fund<sup>12</sup> received \$2,132,946 in revenues from State Wildlife Grants (35%), other grants and contracts (32%), fees (22%), and the "Endangered Species" income tax checkoff and direct donations (11%). Both Funds operate in the black.

The Division's mission has changed, as has its successes and its challenges, as it draws near to its sesquicentennial. The essential powers and authorities which now allow it to pursue and accomplish that mission include: (1) authority—subject to any federal powers—over all (including exotics) mammals, birds, reptiles and amphibians, fish<sup>13</sup> and certain categories of invertebrates and wild plants; (2) a strong administrative and regulatory citizen's Board with the power to make appointments, set policy, enact regulations and sustain a long-term approach; (3) the authority to quickly set seasons, bag limits, methods of take, and other regulatory measures<sup>14</sup> affecting the Division's activities, following a transparent public hearing process; (4) dedicated funds for holding and dispersing the Division's receipts, which by law cannot be diverted to expenditures other than those of the Division; (5) a strong and continuing process of wildlands acquisition, protecting and conserving key facets of the state's biotic diversity; and (6) a highly educated and skilled professional work force working in concert with each other and with colleagues, cooperators, and constituents.

If, then, the essence of wildlife management is indeed the management of wildlife-related impacts<sup>1</sup>—those effects or events involving people and wildlife, management interventions, or stakeholders—what changes and challenges will face the Division in accomplishing its mission in the remainder of the 21st century?

"If you do not think about the future, you cannot have one"— John Galsworthy (1928)<sup>15</sup>

The Division—like most, and probably all, fish and wildlife agencies—has progressed through the Leopoldian sequence of "game" management and game policy administration<sup>16</sup> with frequent advances and accomplishments and occasional digressions (Table 6). Emergent and unexpected challenges are now at hand<sup>17</sup>, including:

1. Rapid global climate change exacerbated by human enrichment of atmospheric carbon is a profound reality<sup>18,19</sup>. Sportsmen and other outdoor enthusiasts are not immune and new realizations, commitments, coalitions, approaches, and funding mechanisms will be required<sup>20</sup>. The Division<sup>21,22</sup> and the Department<sup>23</sup> are working in concert with other entities to understand the effects of climate change on fish, wildlife and their habitats and to develop adaptive management strategies to buffer and mitigate the inevitable alterations to the environment and human lifestyles.

2. Energy production and extraction drives a sharp dichotomy between those favoring energy independence or new renewable energy sources and those who argue that the environmental or social costs of those energies are too high. Hydraulic fractur-ing<sup>24,25</sup>, natural gas pipelines<sup>26</sup> and wind energy facilities<sup>27,28</sup> all have their partisans and their antagonists. Wind energy, in particular, has been proposed on Berkshire mountaintops as well as in coastal Sounds and will continue to challenge the Division to balance society's needs and desires against those of fish and wildlife.

3. Emergent and resurgent wildlife diseases pose a dramatic challenge to fish and wildlife populations as well as to  $people^{29,30}$ . Many wildlife diseases are endemic density-dependent population-regulation mechanisms, historically given scant attention by wildlife conservation entities<sup>31</sup>. Yet, when a translocated or mutated pathogen is introduced to a naïve population, catastrophic mortality may result (as with bats and white-nose syndrome). Emerging infectious diseases (1940-2004) are dominated (60%) by zoonoses, of which 72% originated in wildlife<sup>32</sup>. These represent the most significant, growing threat to human health of all emerging infectious diseases. Wildlife disease surveillance and management<sup>31</sup> must be integral to wildlife conservation and human health.

4. Adverse interactions between humans and wildlife are nothing new, provoking bounties, predator control, exclusion devices and an angry or frightened citizenry. "Nuisance" wildlife—often in the eye of the beholder—has elicited both a nationwide business in animal damage control and a growth in wildlife damage management as a science<sup>33</sup>. Conservation—and outright protection—can have consequences, often unintended. Locally abundant wildlife can challenge an agency and the public to choose conflict or coexistence<sup>34,35</sup>. Suburbanites schooled on "Animal Planet" often have different views of nature and make different choices than do rural dwellers with handson life experiences<sup>36,37</sup>. The former often view the land as a site on which to build



Figure 67. Children admiring a youthful angler and his catch.

large structures and open space as manicured lawns with bordering beds of bright exotic blossoms. They fear the dark forests and murky waters and would see Old Ben reduced to a few chattering squirrels<sup>38</sup>. Multi-faceted programs which promote stable wildlife populations<sup>39</sup> and an enlightened suburban land ethic<sup>40</sup> have the potential to lessen such conflicts and controversies.

5. Leopold<sup>41</sup> urged that progressive "game administration" must include "starting to encourage private management. Regulating private management in the public interest". Simply put, this is participatory wildlife management. The state does not own wildlife, nor does the individual, except when lawfully reduced to possession through a licensing process. Wildlife is a public trust and the collective owners have a right to hold the trustees to their duty. The integration of ecology and human dimensions<sup>42</sup>, vigorous, effective and accurate education programs and timely communications<sup>43</sup>, and informed stakeholder ac-

ceptance<sup>44,45</sup> are unquestionable necessities in modern-day resource conservation.

6. Funding will continue to drive the extent and direction of fish and wildlife conservation. License fees and federal aid grants and reimbursements have been the backbone of the state agencies' funds<sup>46</sup>. However, changing demographics have caused participation in traditional sporting activities to dwindle and thus the funding source. An alternative model encompassing all nature enthusiasts<sup>47</sup> is sorely needed but slow in coming. In the interim, agencies must seek to diversify their funding base with the aggressive pursuit of directed grants, fees, donations, and general taxation.

7. Politics is the art of the possible<sup>48</sup>. State and federal resource management agencies exist as a component of a larger structure of governmental entities, typically headed by political appointees, themselves responsible to elected public officials who ofttimes must heed the loudest drumbeats. Natural resource management is not immune from political influence, although many agencies have boards or commissions which provide a degree of insulation. Natural resource managers, and scientists as well, must understand their role in the political struggle<sup>48</sup> and adeptly further their goals through a process of politic engagement, honest and factual education, collaborative dialogue<sup>50</sup>, reasonable compromise, and a sensible approach to wins and losses.

8. Dallas Lore Sharp was right. The influence of the brooks and fields makes for the health of the spirit. Yet, our children (Figure 67) are losing<sup>51</sup> the generational bond between themselves and those who once went forth each day, into the sun-dappled woodlands, rippling streams and flower-brightened meadows. So too, the naturalists<sup>52</sup>, field biologists<sup>52</sup>, and hunters and anglers<sup>53</sup> are withering away. Agencies must devote resources, staff, and energy to research-based programs of recruitment and retention<sup>54</sup>. Why does the salmon thrust upstream, persevering despite difficult obstacles? To return to whence it came. "River run, from swerve of shore to bend of bay"<sup>55</sup>.



Figure 68. Merrimack River, Haverhill.

#### ACKNOWLEDGMENTS

The germination of this book began 40 years ago when I read the series of historical articles in *Massachusetts Wildlife* published in 1964-65 about the origins of the Division of Fisheries & Wildlife. I thank Director Wayne MacCallum for his vision in finally bringing the idea, and my substantial collection of notes and references, to fruition. I particularly thank Paul Caruso, Laura Conlee, William Davis, Robert Deblinger, Stephen DeStefano, Thomas French, Richard Hartley, Ellie Horwitz, Steven Hurley, Mark Jester, Kristin McCarthy, Mark Madison, Peter Mirick, Richard Murray, George Pushee, Susan Sacco, Martha Sheldon, Caleb Slater, David Szczebak, Mark Tisa, Philip Truesdell, Richard Turner, Andrew Vitz, and Christina Wolfe for their assistance and cooperation. I thank Robert Deblinger, Thomas French, Marion Larson, Kristin McCarthy, Wayne MacCallum, Thomas O'Shea and Caleb Slater for their careful review of the manuscript and Marion Larson, Bill Byrne and David Gabriel for editorial, photographic and graphics support. A debt also is owed to many other present and former colleagues, cooperators and friends too numerous to mention specifically for their remarks, suggestions and recollections over the past 44 years.

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#### **TABLES**

Dates	Commissioners	Title
1865- 1866	Thomas Lyman & Alfred R. Field	Fisheries
1867	Lyman & Field	Same
1868	Lyman & Field	Same
1869	Lyman, Field & E.A. Brackett	Inland Fisheries
1870	Lyman & Brackett	Same
1871	Lyman, Brackett & Thomas Talbot	Same
1872	Brackett & Talbot	Same
1873	Lyman, Brackett & Asa French	Same
1874	Lyman, Brackett & French	Same
1875	Lyman, Brackett & French	Same
1876	Lyman, Brackett & French	Same
1877	Lyman, Brackett & French	Same
1877- 1878	Lyman, Brackett & French	Same
1878- 1879	Lyman, Brackett & French	Same
1879- 1880	Lyman, Brackett & French	Same
1880- 1881	Lyman, Brackett & French	Same
1881- 1882	Brackett, French & F.W. Putnam	Same
1883	Brackett, French & Putnam	Same
1884	Brackett, French & Edward H. Lathrop	Same
1885	Brackett, Putnam & Lathrop	Same
1886	Brackett. Putnam & Lathrop	Fish & Game
1887	Brackett, Putnam & Lathrop	Inland Fisheries & Game
1888	Brackett, Putnam & Lathrop	Same
1889	Brackett, Lathrop & Isaiah C. Young	Same
1890	Brackett, Lathrop & Young	Same
1891	Brackett, Lathrop & Young	Same
1892	Brackett, Lathrop & Young	Fisheries & Game
1893	Brackett, Lathrop & Young	Same
1894	Brackett, Young & Elisha D. Buffington	Same
1895	Brackett, Young & Buffington	Same
1896	Brackett, Young & Buffington	Same
1897	Brackett, Young & Buffington	Same

Table 1.	Massachusetts	Commissioners of	n Fisheries	& Game,	1866-1919.
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1000	Draglatt Values & Duffrester	Sama
1898	Brackett, Young & Buffington	Same
1899	Joseph W. Collins, Brackett, Buffington	Same
1900	Collins, Brackett & John W. Delano	Same
1901	Collins, Brackett & Delano	Same
1902	Collins, Brackett & Delano	Same
1903	Collins, Brackett & Delano	Same
1904	George W. Field, Brackett & Delano	Same
1905	Field, Brackett & Delano	Same
1906	Field, Brackett & Delano	Same
1907	Field, Brackett & Delano	Same
1908	Field, Delano & George H. Garfield	Same
1909	Field, Delano & Garfield	Same
1910	Field, Delano & Garfield	Same
1911	Field, Delano & George H. Graham	Same
1912- 1914	Field & Graham	Same
1912- 1914	Graham (1912-13) & W.C. Adams (1914)	Same
1915	Field, Graham & Adams	Same
1916	Field (exp. 2-16), Adams, Graham, Millett	Same
1917	Adams, Graham & Arthur L. Millett	Same
1917- 1918	Adams, Graham & Millett	Same
1918- 1919	Adams, Graham & Millett	Same

Dates	Director	
1919-1931	William C. Adams	Fisheries & Game
1931-1936	Raymond J. Kenney	Same
1936-1939	Patrick W. Hehir	Same
1939-1941	James E. Agnew	Same
1942-1945	Horatio S. duMont	Same
1945-1948	James F. Power	Same
1948-1955	Robert H. Johnson	Same
1955-1963	Charles L. McLaughlin	Same
1963-1964	Francis W. Sargent	Same
1964-1975	James M. Shepard	Same ("Wildlife" in 1974)
1975-1976	Colton H. Bridges	Fisheries & Wildlife
1976-1979	Matthew B. Connolly, Jr.	Fisheries & Wildlife
1979-1988	Richard Cronin	Fisheries & Wildlife
1988-	Wayne F. MacCallum	Fisheries & Wildlife

Table 2. Directors of the Division of Fisheries & Game (later "Wildlife")1919-2012

Table 3. Fisheries & Wildlife Board Members, 1948-2012.

Dates	Members
1948-	Oscar J. Anderson, James W. Cesan, Matthew T. Coyne,
1949	Ludlow Griscom, Frederick D. Retallick
1949-	Cesan, Coyne, Paul V. Fleming, Ovide N. Lanois,
1950	Frederick A. McLaughlin
1950- 1951	Cesan, Coyne, Fleming, Lanois, McLaughlin
1951- 1952	Cesan, Coyne, Fleming, Lanois, McLaughlin
1952- 1953	Cesan, Coyne, Fleming, Lanois, McLaughlin
1953-	Powell M. Cabot (effective 3-54), Cesan, Coyne, Lanois (until 3-54),
1954	McLaughlin
1954-	Cabot, Cesan, Coyne, Fleming (until 10-54), McLaughlin, Frederick D.
1955	Retallick (effective 10-54)

#### Table 3 (continued). Fisheries & Wildlife Board Members, 1948-2012.

Dates	Members
1955- 1956	Cabot, Cesan, Coyne, McLaughlin, Retallick
1956- 1957	Cabot (died), Cesan, Coyne (term expired), Thomas M. Joyce (succeeded Cabot), McLaughlin, Retallick, Henry F. Russell
1957- 1958	Cesan, Joyce, McLaughlin, Retallick, Russell
1958- 1959	Cesan (until 5-59), Harper L. Gerry (effective 8-58), Joyce, Bert B. Nietupksi (effective 5-59), Frederick A. McLaughlin (until 8-58), Retallick, Russell (resigned)
1959- 1960	Lawrence Barbieri (effective 10-59), Gerry, Joyce, F. Stanley Mikelk (effective 2-60), Nietupski, Retallick (until 10-59)
1960- 1961	Barbieri, Gerry, Joyce (until 6-61), Mikelk, Nietupski, Roger D. Williams (effective 6-61)
1961- 1962	Barbieri, Gerry, Mikelk, Nietupski, Williams
1962- 1963	Barbieri, Harry C. Darling (effective 12-62), Gerry (until 10-62), Mikelk, Nietupksi, Williams
1963- 1964	Barbieri (term expired?), Martin H. Burns (effective 11-63), Darling, Mikelk, Nietupski (term expired?), Edward J. Tierney (effective 5-64), Williams
1964- 1965	Burns, Darling, Mikelk, Tierney, Williams
1965- 1966	Burns, Henry D. Columbo (effective 5-66), Darling, Mikelk, Tierney
1966- 1967	Burns, Columbo, Darling, Bradlee E. Gage (effective 1-67), Mikelk (term expired), Tierney
1967- 1968	Burns, Columbo, Darling, Gage, Tierney
1968- 1969	Burns, Columbo, Darling, Gage, Tierney
1969- 1970	Kenneth F. Burns (effective 2-70), M. Burns, Columbo, Darling, Gage, Tierney (until 10-69)
1970- 1971	K. Burns, M. Burns, Columbo (term expired), Darling, Gage, Roger D. Williams (effective 10-70)
1971- 1972	K. Burns, M. Burns, Darling, Gage, Williams
1972- 1973	K. Burns, M. Burns, Darling, Gage, Williams
1973- 1974	K. Burns, M. Burns, Darling (until 8-73), Gage, Henry R. Russell (effective 8-73), Williams
1974- 1975	K. Burns, M. Burns, Gage, Russell, Williams
1975- 1976	James Baird (new position 7-75), K. Burns, M. Burns, Gage, Russell, Philip Stanton (new position 7-75), Williams

1976- 1977	Baird, K. Burns, M. Burns, Gage, Russell, Stanton, Williams
1977- 1978	Baird, K. Burns, M. Burns, Donald Coughlin (succeeded Williams), George L. Darey (succeeded Russell), Gage, Russell (term expired), Stanton, Williams (term expired)
1978- 1979	Baird, Nancy E. Begin (succeeded M. Burns), K. Burns, M. Burns (term expired), Coughlin, Darey, Gage, Stanton
1979- 1980	Baird, Begin, K. Burns, Coughlin, Darey, Gage, Stanton

## Table 3 (continued). Fisheries & Wildlife Board Members, 1948-2012.

Dates	Members
1980- 1981	Baird (term expired), Begin, Colton H. Bridges (succeeded Stanton), K. Burns, Coughlin (resigned), Darey, Gage, Richard Kleber (succeeded Baird), Jack Sylvia (succeeded Coughlin), Stanton (term expired)
1981- 1982	Begin, Bridges, K. Burns, Darey, Laurence Fountain (succeeded Gage), Gage (resigned), Kleber, Sylvia
1982- 1983	Begin, Bridges, K. Burns (died 7-82), Darey, Fountain, Kleber, Sylvia, Raymond Whitaker (succeeded Burns)
1983- 1984	Begin, Bridges, John F. Creedon (succeeded Sylvia), Darey, Fountain, Kleber, Sylvia (resigned)
1984- 1985	Begin, Bridges, Creedon, Darey, Fountain, Kleber, Whitaker
1985- 1986	Begin, Bridges, Creedon, Darey, Fountain, Gwilym S. Jones (succeeded Kleber), Kleber (term expired), Whitaker
1986- 1987	Begin, Bridges, Creedon, Darey, Fountain (until 10-86), Jones, Michael P. Roche (succeeded Fountain 3-87), Whitaker
1987- 1988	Begin, Bridges, Creedon, Darey, Jones, Roche, Whitaker
1988- 1989	Begin, Bridges, Creedon, Darey, Jones, Roche, Whitaker
1989- 1990	Begin, Bridges (died), Creedon, Darey, Ernest W. Foster, Jr. (succeeded Whitaker), Jones, Roche, Whitaker (term expired)
1990- 1991	Begin, Russell A. Cookingham (succeeded Bridges), Creedon, Darey. Foster, Jones, Roche
1991- 1992	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1992- 1993	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1993- 1994	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1994- 1995	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1995- 1996	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1996- 1997	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche

## Table 3 (continued). Fisheries & Wildlife Board Members, 1948-2012.

1997- 1998	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1998- 1999	Begin, Cookingham, Creedon, Darey, Foster, Jones, Roche
1999- 2000	Begin, Cookingham, Creedon, Darey, Foster, Jones (resigned 12-99), Joseph S. Larson (effective 2-00), Roche
2000- 2001	Begin (resigned 11-00), Cookingham, Creedon, Darey, Foster, Larson, Roche, Frederic Winthrop, Jr. (effective 11-00).
2001- 2002	Cookingham, Creedon, Darey, Foster, Larson, Roche, Winthrop
2002- 2003	Cookingham, Creedon, Darey, Foster, Larson, Roche, Winthrop
2003- 2004	Cookingham, Creedon, Darey, Foster, Larson, Roche, Winthrop
2004- 2005	Cookingham, Creedon, Darey, Foster, Larson, Roche, Winthrop
2005- 2006	Cookingham (until 8-05), Creedon, Darey, Foster, Larson, Roche, Brandi Van Roo (effective 10-05), Winthrop
2006- 2007	Creedon, Darey, Foster, Larson, Roche, Van Roo, Winthrop
2007- 2008	Creedon, Darey, Foster, Larson, Roche, Van Roo, Winthrop
2008- 2009	Creedon, Darey, Foster, Larson, Roche, Van Roo, Winthrop
2009- 2010	Bonnie Booth (replaced Foster), Creedon, Darey, Foster (until 10-09), Larson, Roche, Van Roo, Winthrop
2010- 2011	Booth, Creedon, Darey, Larson, Roche, Van Roo, Winthrop
2011- 2012	Booth, Creedon, Darey, Larson, Roche, Van Roo, Winthrop

Dates	Chairman	Agency
1948- 1950	Ludlow Griscom	Fisheries & Game
1950- 1956	Matthew T. Coyne	Same
1956- 1957	Powell M. Cabot	Same
1957- 1959	James W. Cesan	Same
1959- 1960	Frederick D. Retallick	Same
1960- 1962	Harper L. Gerry	Same
1962- 1965	Roger D. Williams	Same
1965- 1970	Harry C. Darling	Same
1970- 1975	Roger D. Williams	Same ("Wildlife" in 1974)
1975- 1982	Bradlee E. Gage	Fisheries & Wildlife
1982-	George L. Darey	Same

# Table 4. Chairmen of the Massachusetts Fisheries & Game(later "Wildlife") Board, 1948 to 2012.

# Table 5. Natural Heritage and Endangered SpeciesAdvisory Committee\* Members, 1981-2012.

Dates	Members
Dails	
1981	Richard T. Kleber (Chair), Kathleen S. Anderson, Robert A. Clark, Marilyn J. Flor, Karsten E. Hartel, Gwilym S. Jones, Rudolph Stone
1982	Kleber, Anderson, Clark, Flor, Hartel, Jones
1983	Kleber, Anderson, Clark, Flor, Hartel, Jones, James McCarthy
1984	Jones (replaced Kleber as Chair in Jan 84), Anderson, Clark, Flor, Hartel, Jones, Kleber, McCarthy
1985	Jones, Anderson, Flor, Hartel, Kleber, McCarthy
1986	Jones, Anderson, Flor, Hartel, C. Barre Hellquist, Leslie Kaufman, Mark Pokras
1987	Jones, Anderson, Caren Caljouw, Flor, Hellquist, Kaufman, Pokras
1988	Jones, Anderson, Caljouw, Flor, Frederick Greeley, Hellquist, Pokras
1989	Jones, Anderson, Caljouw, Flor, Greeley, Hellquist, Pokras, Douglas Smith
1990	Jones, Anderson, Flor, Greeley, Hellquist, Pokras, Smith
1991	Jones, Anderson, Flor, Greeley, Hellquist, Tim Simmons, Smith
1992	Jones, Anderson, Flor, Hellquist, Tim Simmons, Smith, Pamela Wetherbee
1993	Jones, Anderson, Flor, Hellquist, Tim Simmons, Smith, Pamela Wetherbee
1994	Jones, Anderson, Flor, Hellquist, James MacDougall, Tim Simmons, Pamela Wetherbee
1995	Jones, Anderson, Flor, Hellquist, MacDougall, Tim Simmons, Pamela Wetherbee
1996	Jones, Anderson, Flor, Hellquist, MacDougall, Tim Simmons, Pamela Wetherbee
1997	Jones, Anderson, Flor, Hellquist, MacDougall, Mark Mello, Tim Simmons, Pamela Wetherbee
1998	Jones, Anderson, Flor, Hellquist, MacDougall, Mello, Pamela Wetherbee
1999	Jones, Anderson, Flor, Hellquist, Mello, Steven M. Meyer, Pamela Wetherbee
2000	Anderson (replaced Jones as Chair Jan 00), Flor, Hellquist, Joseph S. Larson, Mello, Meyer, Pamela Wetherbee
2001	Anderson, Flor, Hellquist, Larson, Mello, Meyer, Pamela Wetherbee
2002	Anderson, Flor, Hellquist, Larson, Mello, Meyer, Jonathan A. Shaw, Pamela Wetherbee
2003	Anderson, Flor, Larson, Mello, Meyer, Shaw, Wetherbee
2004	Anderson, Flor, Larson, Mello, Meyer, Thomas Rawinski, Shaw
2005	Anderson, Flor, Larson, Mello, Meyer, Rawinski, Shaw
2006	Anderson, Flor, Larson, Mello, Meyer, Rawinski, Shaw
2007	Anderson, Flor, Larson, Mello, Glenn Motzkin, Rawinski, Shaw
2008	Anderson, Flor, Larson, Mello, Motzkin, Rawinski, Shaw
2009	Anderson, Flor, Larson, Mello, Motzkin, Rawinski, Shaw
2010	Anderson, Flor, Larson, Mello, Motzkin, Rawinski, Shaw
<u>2011</u> 2012	Anderson, Flor, Larson, Mello, Motzkin, Rawinski, Shaw
	Anderson, Flor, Larson, Mello, Motzkin, Rawinski, Shaw

\* The Committee existed as an *ad hoc* entity from September 1981 until established in acordance with statute in December 1983

Date	Event
1866	Commissioners on Fisheries appointed
1869	Commissioners on Fisheries given authority over all fisheries
1876-89	Atlantic salmon restoration on Merrimac River fails
1886	Fisheries Commissioners given authority over Game
1894	Sutton Hatchery built; first state-owned fish hatchery
1895	Introduction of ring-necked pheasant
1897	First Superintendent of Hatcheries hired
1898-99	First paid deputy enforcement officers
1900	First agency-issued "Abstracts" of fish and game laws
1902	First participation in a Sportsman's Show
1902	Authority to conduct investigations into fish & game matters
1905	First biologist hired
1905	Hunting licenses required for non-naturalized aliens
1906	First pheasant hunting season
1907	Hunting licenses required for non-resident citizens
1907	Land acquired for a heath hen reservation
1909	First resident hunting "registration"
1912	Wilbraham Game Farm built; first state-owned game farm
1919	Commission on Fisheries & Game becomes a Division
1919	First fishing license (did not apply to women and minors)
1920	First resident fishing licenses (in waters stocked since 1-1-10)
1921	Women included in licensing requirements
1923	Mass. law to conform to federal law regarding migratory birds
1924	Nye property in Sandwich is the first donated under new law
1924	Penikese Island becomes the first wildlife sanctuary
1925	First sporting license; first adult trapping license
1930	Sporting license required to fish in any inland waters
1930	Authorization to acquire public fishing grounds
1931	Authorization to acquire public shooting grounds
1931	Minor (15-17) fishing licenses; free licenses over 70
1933	Archery allowed for deer hunting within firearms season
1933	Ad Hoc Advisory Council for the Division created
1939	Division separated into 3 agencies (but temporary until 1-30-40)
1939	Enabling legislation to participate in Pittman-Robertson program
1942	First research bulletin published
1945	Inland Fish & Game Fund established
1946	Phillips Wildlife Laboratory established at Upton
1948	Fisheries & Game Board established
1949	Information & Education program begun

## Table 6. Important Events in the History of the Division of Fisheries & Wildlife.

# Table 6 (continued). Important Events in the Historyof the Division of Fisheries & Wildlife.

Junior Conservation Camp begun at Swann Forest in Monterey
Massachusetts Wildlife begun as a mimeographed newsletter
Birch Hill becomes the first public shooting ground
Inauguration of District Manager system
Enabling legislation to participate in Dingell-Johnson program
Authorization to acquire land for fish & wildlife management
Pantry Brook becomes the first agency wildlife management area
Director and Board given authority to set rules and regulations
Certificate of competency required; minors w/o previous license
New Field Headquarters in Westborough to replace Phillips Lab
Massachusetts Wildlife first issued in magazine format
First formal Board policy document
First archery stamp
License fee increase of \$1.00, subject to appropriation
Recodification of Chapter 131
Sutton Fish Hatchery closed (sold 1970)
McLaughlin Trout Hatchery; first modern hatchery
\$1 millon bond issue for wetlands acquisition
First primitive firearms deer season
Division renamed "Division of Fisheries & Wildlife"
Board increased by two at-large non-game members
Regulatory authority for reptiles & amphibians
First modern-day spring turkey hunting season
First statutorily authorized list of endangered species
Nongame Wildlife Fund & income tax checkoff established
Natural Heritage Program transferred from DEM to DFW
Wilbraham Game Farm closed
First bald eagle nesting since 1905
First modern-day fall turkey hunting season
Massachusetts Endangered Species Act enacted
Mass. Endangered Species Act regulations promulgated
Successful "Question 1" referendum prohibiting traps <etc.></etc.>
Inception of Biodiversity Initiative
"BioMap" published
First nesting of peregrine falcons at a natural site since 1955
"Living Waters" published
First statewide (no turkeys on Nantucket) spring turkey hunt
The Division's forests attain green certification
The Division's two dedicated funds are eliminated and restored

2006	Inception of on-line license sales (in addition to hard copy)
2012	Inception of all-electronic licensing (no hard copy)
2012	Field Headquarters moves from Westborough to West Boylston
2014	Anticipated date of completion of new Field Headquarters



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